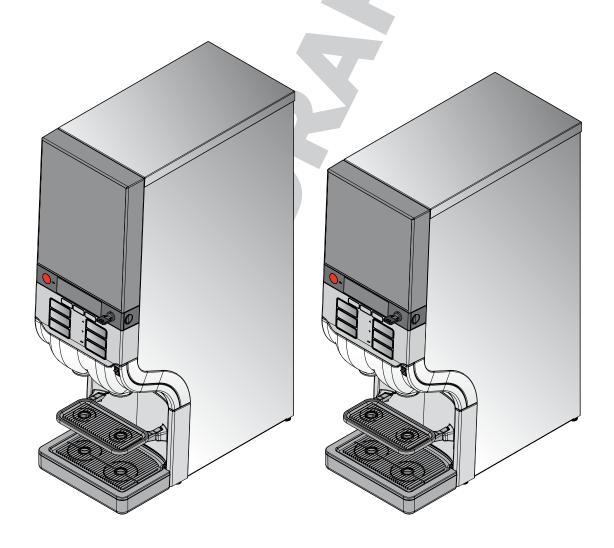


## **Service Manual**

Cafitesse 110
Cafitesse 120
Next Generation





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#### Installation / putting into operation 2

#### Transport / handling of the dispenser during transport 2.1

#### Dimensions of the dispenser including packaging:

Dispenser type	Cafitesse 110 NG	Cafitesse 120 NG
Height:	980 mm / 38.6 in	1055 mm / 41.5 in
Width:	395 mm / 15.6 in	395 mm / 15.6 in
Depth:	595 mm / 23.4 in	595 mm / 23.4 in

#### Original packaging by the manuafacturer:

- European pallets (1200 mm x 800 mm / 47.2 in x 31.5 in): 8 Cafitesse 100 NG dispensers (2 piles with 4 dispensers)
- Small European pallets (600 mm x 800 mm / 23.6 in x 31.5 in): 4 Cafitesse 100 NG dispensers (2 piles with 2 dispensers)
- USA pallets (1200 mm x 1000 mm / 47.2 in x 39.4 in): 10 Cafitesse 100 NG dispensers (2 piles with 5 dispensers)

#### Information on the packaging of the dispenser:

will be added

#### Storage and transport in general:

- ATTENTION: Transport the dispenser carefully.
  - Do not throw the dispenser or handle it incorrectly.
  - Do not transport several dispensers on top of each other unless they are fixed to a pallet as shown in the following section.
  - Only transport the dispenser in an upright position.
  - · When storing the dispenser, ensure that it is only stored indoors and take precautions against parasites.
  - · Protect the dispenser from the influence of unusual odors.
  - · The dispenser must be stored in dry and frostproof ambient conditions, and must not be exposed to sunlight.
  - Completely drain the water from the boiler prior to storage and transport, in order to prevent damage due to frost. Remove any residual water from hoses and valves.
  - If there is the danger of damage due to frost, when the dispenser is reinstalled after a longer period of storage, check and replace boiler, hoses and valves. Carry out a functional test.

2 - 2 August 2009

#### Transport due to location change

When you transport a used dispenser to a new location:

- Remove the product pack(s) (BIBs).
- · Disconnect the mains plug.
- · Disconnect the dispenser from the water supply.

#### ATTENTION:

Completely drain the water from the boiler prior to storage and transport, in order to prevent damage due to frost. Remove any residual water from hoses and valves.

· Drain the boiler

WARNING: Hot water!

There is danger of being scal-

ded.

- Tilt the dispenser forwards in order to drain the residual water.
- Pack the dispenser in such a manner that a safe transport is guaranteed. Use the original packageing if possible (fig. 1, 2).
- The dispenser must have been cleaned correctly before you store it for a longer period of time.
- When used dispensers are stored for a long time,
  - the inlet valve of the water supply hose towards the boiler

#### as well as

the cold water inlet valve (option cold water / café cool)

#### and

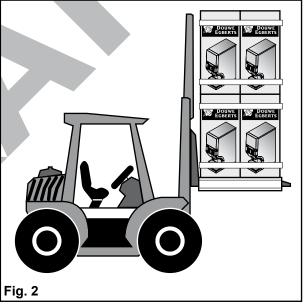
- the respective inlet hoses

must be disconnected in order to ensure that the hoses are empty. In this way future spoiling fo the tast is avoided.

#### **WARNING:**

If there is the danger of damage due to frost, when the dispenser is reinstalled after a longer period of storage, check and replace boiler, hoses and valves. Carry out a functional test.





## 2.2 Installation requirements

#### **Electrical supply:**

#### Dispenser:

- Length of the electical supply cable: 1.80m / 70.8in
- Use a national adapter for the mains plug if required
- European 3-phase version:
   The power supply cable has 5 cores, which enables fixing a power supply plug for 3-phase operation

#### Customer:

- · A grounded connection is required.
- The mains connection must match the dispenser output.
- · The dispenser must be protected individually.
- Recommendation:
   Use a fault current safety switch and an all poles controlling contact breaking device.
- European version:
   When a fixed power supply is used for the
   dispenser (not via mains plug), a separation
   device with contact openings of at least 3 mm
   for each pole must be installed. The ground
   connection must be connectied tightly.

#### Water supply:

#### Dispenser:

- Connections for hoses: 3/4" 5/8-18 UNF
- National connection pieces are included in the corresponding country kits
- Install a water filter (delivered with the dispenser for some countries)
- Hot water connection:
   For the connection of the dispenser to a hot water supply (higher than 60°C / 140°F) a hot water inlet valve must be installed in the dispenser (option)
- · Additional cold water or café cool dispensing:
  - Install a pressure limiter or
  - a pre-cooling unit, which includes a pressure limiter.

#### Customer:

- Water supply line:
  - dynamic pressure of min. 0.8 bar at 10 liters / minute min 11.6 psi at 2.6 USgal / minute
- static pressure of max. 10 bar / 145 psi
- temperature of max. 60°C / 140°F
- Use a stop valve and a non return valve
- · Hot water connection:
  - possible with a special inlet valve
  - temperature: more than 60°C / 140°F, max. 75°C / 167°F
  - use only copper pipes
- Additional cold water and café cool dispensing
  - an additional water supply line is required,
  - dynamic pressure of min. 0.8 bar at 12 liters / minute min. 11.6 psi at 3.2 USgal / minute

#### ATTENTION:

- Check the drinking water quality before installation, especially when installing the cold water / café cool option or water tank for manual filling. A drinking water filter should always be installed
- When new water pipes are installed, flush them sufficiently before the installation of the dispenser.

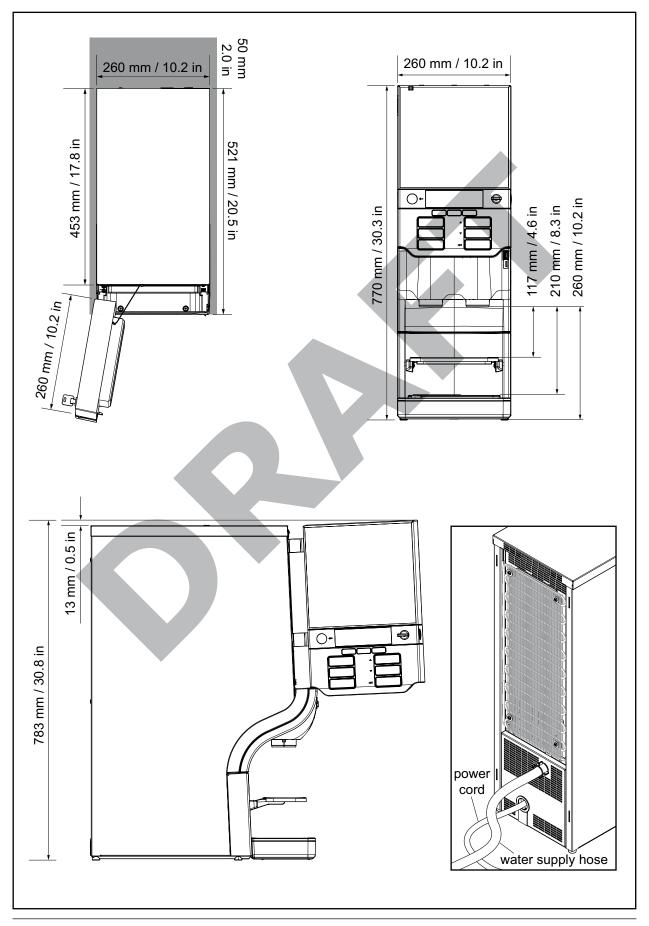
Read local regulations carefully, when you choose water suppy lines. Use only neutral material with respect to taste,

#### Additional requirements:

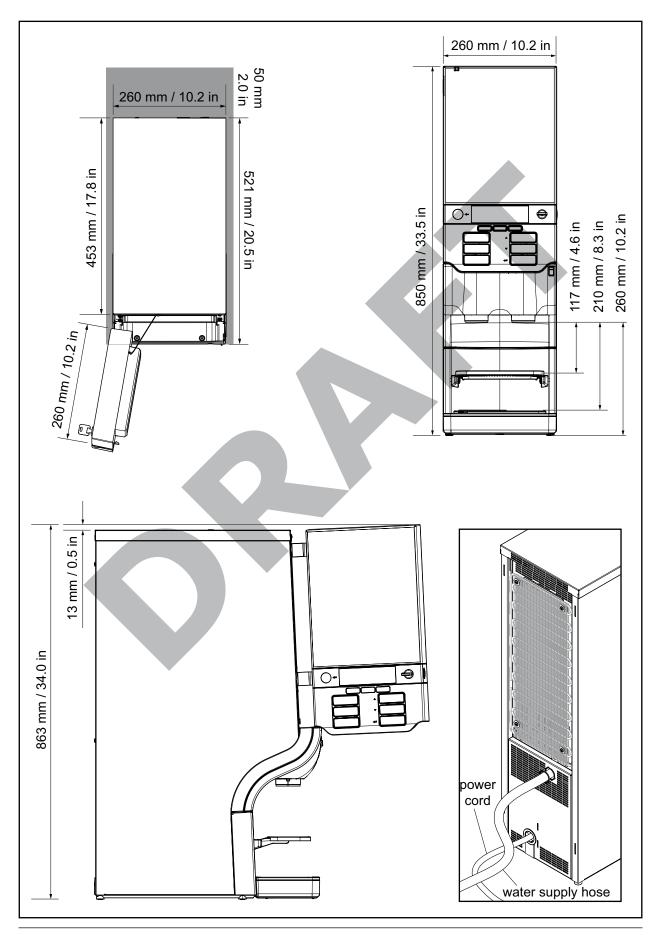
Installation surface: even, nonskid floor Walls and ceiling: dustfree and clean

2 - 4 August 2009

### **Space requirements Cafitesse 110NG:**



#### **Space requirements Cafitesse 120NG:**



2 - 6 August 2009

## 2.3 Technical Specification

Description	Value	Unit
-------------	-------	------

Energy	Min.	Max.	
Heat-up phase measurement (HU) *		XXX	Wh
Idle Phase measurement (IM) *		XXX	Wh/h
Idle Phase measurement (in energy saving mode) (IM) *		XXX	Wh/h
Vending Phase measurement (VM) *		xxx	Wh
Average Drink Volume measurement (DV) *		xxx	Ltr
Average Drink Temperature measurement (DT) *		xxx	°C
Energy Consumption per liter (ECPL) *		xxx	Wh/Ltr
Potential savings when using energy saving mode (based on 10hrs saving mode time per 24hrs)		xxx	Wh/24hr
Wake-up functionality present from Energy saving mode?	Yes, takes x mi	nutes	-
Length power cable Europe / North America		1.80 / 5	m / ft
Sound Level (stand-by,1m distance)		XX	dB (A)
* with x.x kW heating element			

Boiler (capacity)	(1-phase)	(3-phase)	
Maximum consumed power	x.x	x.x	kW
Boiler contents		9 / 2.4	Ltr / USgal
Heating Elements (at 230V)	x.x / x.x /x.x	x.x	kW
Heating Elements (at 240V, USA)	x.x / x.x / x.x		kW
Heating Elements (at 208V, USA)	x.x / x.x / x.x		kW
Heating Elements (at 120V, USA)	x.x	-	kW
Boiler temperature 7	96 / 205		°C / °F
Boiler temperature energy saving mode	63 / 145		°C / °F
Hourly capacity (coffee) at max. heating power	xx	xx	Ltr/h
	xxx	xxx	Cups/h
Peak capacity	x.x / x.x		Ltr / USgal
Recovery time	x	x	Min.
Recommended capacity based on 125ml cup volume	up to 200		x 1000
			cups/year
Recommended number of consumers	minimum 25		-
Possibility to increase capacity (pre-heating ?)	Yes (with pre-h	eating) ??	-

Cooling (capacity)	Normal	Maximum	
Normal cooling compartment temperature	x/xx.x		°C / °F
Cooling capacity	~x (standby)	~xx (on)	W
Continuous cooling performance (delta T @ Tambient of 32° C / 90° F, 90 %RH)		xx / xx	°C / °F
Power consumption compressor	x (standby)	xx (on)	W

Volume of ingredient containers

liter

Description	Value	Unit
Ingredient containers		
Туре	Bag in box	
Number of containers per machine	1	

Drip tray			
Capacity	x	liter	<del>\\</del>

1.25 or 2

Drink dispense times	CFT 110 NG	<b>CFT 120 NG</b>	
Black coffee, 125ml	x	x	sec
Café crème normal / Café crème fast, 125ml *		x/x	sec
Espresso normal / Espresso fast, 50ml *		x/x	sec
Chocolate, 125ml **		x	sec
Pot black coffee, 1ltr	xx	xx	sec
Pot black coffee, 1,5ltr	xx	xx	sec
Tea 125 ml	х	х	sec
* standard setting: normal **when option ,chocolate delivery' is installed			

Dispensing point(s) measurements		
Clearance between drink outlet and cup tray	117 / 4.6	mm / in
Clearance between drink outlet and cup tray	210 / 8.3	mm / in
Max. clearance with drip tray removed	260 / 10.2	mm / in
Clearance between drink outlet and drip tray with air pot extension kit	xxx	mm / in
Max. clearance with drip tray removed	xxx	mm / in
Max. pot diameter	xxx	mm / in
Number of outlets	2	
Cup sensor	no	
Cup illumination 7	no	

Machine weight + sizes	CFT 110 NG	CFT 120 NG	
Weight empty	31.0 / 68.3	34.0 / 75.0	kg / lbs
Weight full	42.0 / 92.6	45.0 / 99.2	kg / lbs
Sizes machine	See separate	drawings	
Height with drain kit	xxx		mm / in
Height with air pot extension kit	xxx		mm / in
Width of machine and payment side module together	xx		mm / in

2 - 8 August 2009

Description	Value	Unit
-------------	-------	------

Machine Packaging	CFT 110 NG	<b>CFT 120 NG</b>	
Type of packaging	Carton box		
Weight carton packaging	xx / xxx		kg / lbs
Sizes packaging height width depth	980 / 38.6 395 / 15.6 595 / 23.4	1055 / 41.5 395 / 15.6 595 / 23.4	mm / in mm / in mm / in
Weight machine including packaging	xx / xxx		kg / lbs
Number of machines per pallet European pallet small European pallet USA pallet	8 4 10		Machines Machines Machines
Allowed stacking height	2		Machines

Connections / installation	Minimum	Maximum	
Connection Water pressure	0.8 dynamic at 10 ltr/min.	10 static	Bar
	11 dynamic at 2.6 USgal/min	140 static	Psi
Connection water temperature	> 0	60 / 140	°C / °F
Hot water connection > 60°C re heater connection	Requires use of	of <del>"pre heater kit</del>	<u>,</u>
Water supply line	1/2" or 3/8" sup	oply line with 3/4	" BSP con-
Operating conditions: ambient temperature	5 / 41	32 / 90	°C / °F
Operating conditions: ambient humidity	10 %	70 %	
Rated power Europe: 230-240 VAC 1 phase (16 A fuse)	Max. 3.5		kW
Rated power Europe: 400 VAC 3 phase (3 x 16 A fuse)	Max. 9.1		kW
Rated power USA: 120 VAC ( 20 A fuse)	Max. 1.4		kW
Rated power USA: 120/240 VAC ( 50 A fuse)	Max. 9.4		kW

### Approvals

VDE, CE, UL, cUL, NSF

The dispenser is radio-shielded complying with EN 55014/VDE 0875, T14.

The dispenser is marked with the CE label - the directive about electrical equipment of low voltage, the directive about electromagnetic compatibility and the machinery directive are applied.

## 2.4 Checklist: instructions for the customer



2 - 10 August 2009

## Transfer if the dispenser to the customer (incl. HACCP - Hazard And Critical Control Points) 2.5



2 - 11 August 2009

## 2.6

**External options** to be used by MSUs and distributors for national information (e.g. on external filters)



2 - 12 August 2009

## 2.7 Unpacking

#### 2.7.1 Unpacking the dispenser =



- Carefully remove the fastener from the cardboard box. Do not use sharp utensils to avoid scratching the dispenser.
- · Remove the cardboard box clamps.
- · Open the cardboard box.
- Take the inner box, which includes the additional parts and the country specific items.
- · Remove the lid stuffing and the lateral stuffing.
- Pull the dispenser with the foil bag out of the cardboard box, remove the foil and place the dispenser upright.
- · Check, if all items are included (see below).

#### 2.7.2 List of all items, that are supplied with the dispenser

#### Contents of the inner cardboard box:

Additional items:

- · Cleaning brush
- · Flush bin
- Pre-selection blind buttons (for respective dispenser types

For Cafitesse 120 NG dispensers only:

Mixing bowl exchange kit

Country specific items:

- Operator USB-key (except for USA)
- · Operator manual
  - electronic version on operator USB-key
  - printed version for USA
- Sticker sheet including drink name stickers and preselection stickers in the language of the country

For USA only:

- Connection pieces for US mains water supply
- Water filter kit

#### 2.7.3 Disposal of packaging and dispenser at the end of their service life

#### **Used packaging:**

Packaging: Material:

Outer cardboard box: Corrugated board Inner packaging: Corrugated board

Composition:

Liner: Kraft liner, GSM substance 150 g/m², marbeled color Fluting paper: Wave substance, GSM substance 105 g/m², brown color

Inner paper: Duplex, GSM substance 170 g/m², brown color

#### Disposal of the packaging and dispenser:

The disposal of the material must always be done in accordance with

- · country specific requirements,
- · legal requirements,
- · safety requirements, and
- · environmental requirements!

## 2.8 Installation of the dispenser

### 2.8.1 Prepare the installation

#### Tools for the installation

Prepare the following tools for the installation:

Tools	required for	
<ul> <li>Service USB-key or</li> <li>Windows based service device with USB connector</li> </ul>	the programming of customer specific settings	
Several screw drivers	the installation of customer specific kits	
Pressure gauge	the measuring of the water pressure	
Adapter cables		connection to European mains sockets that are / French safety plug socket.

2 - 14 August 2009

## Type plate and dispenser type coding

1 2	3
WITTENBORG C120NG	/S2LP1-MKT 050911 123456
VOLT VOLT	230-240 v~ Hz/cPs. 50/60
TOTAL TOTAL	3,5 kW KÜHLUNG,REFRIGERATION 115 W
HEIZUNG . HEATING HEATING CHAUFFAGE	3,3 kW COMPRESSOR 0,5 A
7 Charrage with	
	ATM bar Refrigerant: R134 a: 0,085kg
	Bar N&W Global Vending
Min. dyn. line pres. 0,8bar, Max	
11 Contains g	reenhouse emissions fluorinated gases regulated by the Kyoto protocol as fluorurati ad effetto serra disciplinati dal protocollo di Kyotol
Hermetical	
1 C120NG - dispenser type	4-9 Electrical connection values
<ul><li>Dispenser type coding, see table below</li><li>Serial number - first 4 digits indicate mont</li></ul>	<ul><li>10 Water pressure indication</li><li>h 11 Approvals</li></ul>
and year of production	II II Approvais
Dispenser type code: C1 X 0NG/Y	ZABCDE
Foam mixing:	
1 2	no foam mixing foam mixing unit installed
	Ioani mixing unit installed
Main version:	
SC	Standard version Cold water version
K	Café cool version
Power pack and heating:	<u>z</u>
	Europe 3-phase
	Europe 1-phase 3500 W
	Europe 1-phase 2700 W Europe 1-phase 2200 W
	North America version (UL, cUL)
	Japan 1-phase 2500W
	Japan 1-phase 1900W Japan 1-phase 1500W
Lock:	O without lock
	L lock included
Dra calcationa.	
Pre-selections:	P pre-selection included
	N no pre-selection available
Dispenser color	[C]
	1 silver
Branding	DE 10 any 2-digit numbering

#### Power supply and power supply cable



- Observe the specifications on the rating plate (see page 2-14).
- Check the monophase plug and ensure that the national voltages and tolerances are provided.
- Ensure that the fuse of the group, to which the dispenser is connected, is in accordance with the national regulations.
- Contact the local power supply company to ask for the voltage values and tolerances, if required.
- · Measure and check the supply voltage.

The 3-phase European version of the dispenser is delivered with a European 5-core mains cable.

This cable can be equipped with different adapters (e.g. for Denmark, Great Britan, or Switzerland).

- · Install the required adapter, if necessary.
- Change the power supply plug, when connecting to a 3-phase current rotary supply.

#### Measuring the water pressure

- Check the static and dynamic water pressure by using the measuring device, which is available as a service part (fig. 1).
- Check the pressure under the most unfavorable conditions, e.g when all remaining water consuming locations are opened (dynamic) and when all are closed (static).
- Connect the pressure gauge to the water pipe with a pressure hose and one of the 4 connection pieces A, B, C, or D, which are supplied with the measuring device (fig. 1).



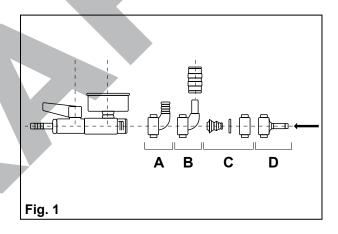
You can use the hose, which serves for connecting the dispenser later.

# ATTENTION: The pressure gauge must be installed behind the drinking water filter.

- Close the water tap located on the pressure testing device and open the stop valve in the water pipe completely.
- Hold the outlet of the pressure testing device into a container and open the tap.



If the outlet needs to be extended, use a hose with an interior diameter of at least 15 mm / 0.59 in.



- Read the dynamic pressure on the pressure gauge. The pressure should always be higher than 0.8 bar (11.5 psi).
- Close the tap and read the static line pressure in the pressure gauge.

The value should be less than 10 bar / 145 psi.

2 - 16 August 2009

#### Connect the dispenser / initialization

The dispenser is suitable for the installation on a flat horizontal counter, table, base stand or a table against a wall (fig. 2).

At the rear of the dispenser, a minimum free space of 50mm / 2.0 in is necessary to ensure sufficient cooling.

- · Place the dispenser on the table.
- If required, install customer specific kits, e.g. a payment side module. Please refer to the respecitive installation instructions, which are delivered with the kit.
- · Connect the dispenser to the water supply.



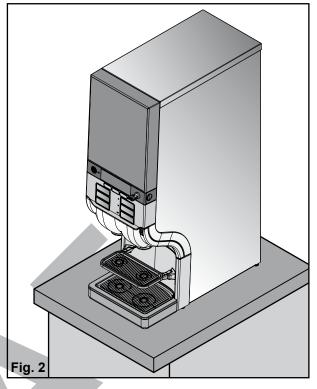
Ensure that the water stop valve connected to the supply line seales properly.

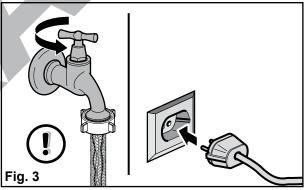
- If the dispenser is equipped for the delivery of cold drinks or cold water (option), install the water connection for the cold water inlet valves, use a pressure limiter.
- Open the water tap (fig. 3).
- Plug in the mains plug (fig. 3).

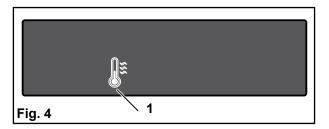
The dispenser now starts operation:

- The water is running into the boiler until it is filled. This takes about 1 minute.
- The display of the dispenser starts, you can see the highlighted ,TEMPERATURE'-icon (1) on the dark background (fig. 4).

The dispenser heats up the water in the boiler. Depending on the heating capacity of the dispenser type, the heating up takes 20 minutes or more.





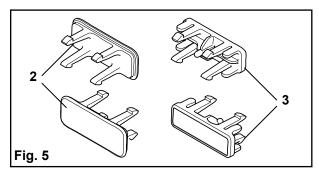


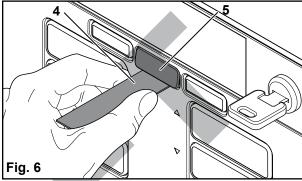
## Insert pre-selection buttons or dummy buttons

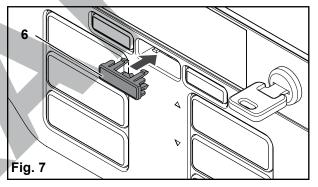
Depending on the request of the customer, replace dummy buttons below the display of the dispenser by preselection buttons or vice versa.

The following description shows the replacement of a dummy button (2) by a preselection (3) button (fig. 5).

- Push the service tool (4) at the longer side behind the dummy button (5) to release the snap fits and remove the dummy button. (fig. 6).
- Insert the preselection button (6) (fig. 7).







# Fix the stickers to the drink buttons and the pre-selection buttons

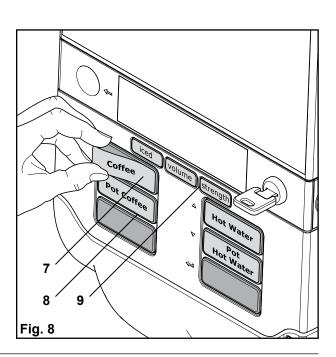


Take care that the surface of the push buttons and the pre-selection buttons is clean and dustfree. Clean the plastic parts with denatured alcohol, if necessary.

 Peel off the respective stickers (7) from the sticker sheet and fix them onto the push buttons (8) and onto the preselection buttons (9) (fig. 8).



Take care to align the sticker accurately to the longer side of the push button. The sticker may not overlap the frame.



2 - 18 August 2009

#### Set date and time of the dispenser

When the water in the boiler is heated up, it may be necessary to do the date/time settings on the dispenser (fig. 9).

pase refer to the operator manual or to chapter rogramming the dispenser of the service manual.

· Do the date and time settings on the disenser.

#### Flush the dispenser

rt the flushing program, if the dispenser does not automatically after the date and time settings (fig. 10).

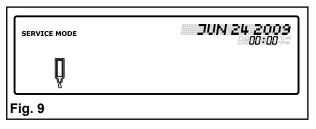
• Put the flush bin under the outlets of the dispenser and carry out the flushing procedure.

#### Start drink dispensing

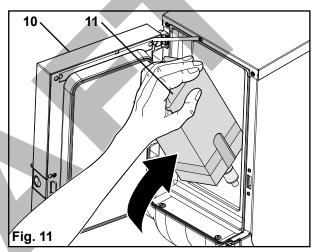
- Start the service programming mode and dedrink settings according to the customer's request.
- Open the dispenser door (10) and insert a product pack (11) into the cooling compartment (fig. 11)

The dispenser is now ready for drink dispensing, the ,Aroma-Lady' icon is shown on the display (fig. 12).

- Place a cup or pot under the drink outlets and start some deliveries.
- Check taste, aroma and temperature of the delivered drink.











2 - 20 August 2009

## **Contents**

Errors	3
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Errors cooling system	3.2
Errors product delivery system	3.3
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Errors hardware and network	3.5
Errors payment system	3.6

#### **Errors water system** 3.1



No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
10	Overboil safety has tripped	21	Software detects the over boil has tripped. Temp 80 °C (178 °F)	Automatically when software detects that sa- fety is manually reset		<ul> <li>1. Overboil sensor defective</li> <li>or heating is ON for too long:</li> <li>2. Temperature sensor defective</li> <li>3. Heating or safety relays defective</li> <li>or there is a boiler overflow:</li> <li>4. High level sensor is defective.</li> <li>5. Inlet valve does not close.</li> </ul>	1. Check the overboil sensor or 2. Check the temperature sensor and wiring. 3. Check and the heating or safety relays and wiring. or 4. Check the high level sensor and wiring. 5. Check, if the inlet valve is not leaking. 6. Check the MCB and wiring. Replace components if neces-	120
11	Boiler water level is too low		Low level sensor = dry	Reset by re- powering the dispenser		1. Water supply tap not open or blocked 2. Water pressure is too low 3. Inlet valve is defective 4. Overflow hose is blocked 5. Low level sensor defective 6. Wiring incorrect or connections defective 7. MCB defective	<ol> <li>Sary.</li> <li>Open or clean tap</li> <li>Check water pressure (see chapter 2)</li> <li>Check / replace inlet valve</li> <li>Check and clean/replace overflow hose</li> <li>Check / replace low level sensor</li> <li>Check wiring and replace connections</li> <li>Replace MCB (see chapter 5K)</li> </ol>	120

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

3 - 2 August 2009

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
12	Boiler level sen- sors not detected		Contact bridge in lever sensor connector is not detected	Automatically when hardware detects the contact bridge		Wiring incorrect or sensor connections defective     MCB defective	Check wiring or replace sensor connections (see chapter 5K)     Replace MCB (see chapter 5K)	120
17	Leaking outlet valves (small leak)		The refill cycles have occurred 5 times without dispensing	Lock/clear button <sup>1)</sup>		Leaking outlet valves	Check the outlet valves     Check on other leakages	
18	Leaking outlet valve (severe leak)		More than 5 refill cycles have occurred without dispensing	Lock/clear button <sup>1)</sup>	After the reset condition the timer restarts	Leaking outlet valves	Check the outlet valves     Check on other leakages	101
19	Refilling boiler takes too long	(17)	Inlet valve was open for 2 minutes	Lock/clear button	On reset the refilling starts again	Water supply tap not open or blocked     Water filter clogged or defective     Water pressure too low     Inlet valve defective     Hoses clogged or defective	<ol> <li>Open or clean tap</li> <li>Clean or replace water filter</li> <li>Check water pressure (see chapter 2)</li> <li>Replace inlet valve</li> <li>Clean or replace hoses</li> </ol>	100
21	Boiler water heating is defective		Heating was continuously on for 45 minutes	Lock/clear button <sup>1)</sup>	May occur after ERR 10 and ERR 11	Wiring incorrect or connections defective     Temperature sensor defective     MCB defective     Heating elements or relays defective	Check wiring or replace connections (see chapter 5K)     Replace temperature sensor (see chapter 5A)     Replace MCB (see chapter 5K)     Replace heating elements or relays (see chapter 5A)	115

3 - 3 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
24	Water temp. too low		Temperature sensor reading: Water temperature below hygiene block setting	Automatically when tempera- ture rises above reset tempera- ture	Error visible on display	Heating element circuit defective.	Check wiring or replace connections (see chapter 5K)     Replace temperature sensor (see chapter 5A)     Replace MCB (see chapter 5K)     Replace heating elements	105
25	Water temp. sensor defective		Reading out of limits	Automatically when temperature reading is within limits		Temperature sensor defective     Incorrect wiring or connections defective     MCB defective	Replace temperature sensor (see chapter 5A)     Check wiring or replace connections (see chapter 5K)     Replace MCB (see chapter 5K)	120
26 🗦	oiler scaled up			Reset via service device		Boiler is calcified	Decalcify boiler	

3 - 4 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

#### **Errors cooling system** 3.2

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
30	Cooling box temperature too high for too long		Temperature sensor reading plus timer above 7 °C	Lock/clear button <sup>1)</sup>		The compressor i switched on:  1. Temperature sensor is not in place  2. Temperature sensor is defective  3. MCB defective	1. Check the positioning of the temperature sensor (see chapter 5F) 2. Replace the defective temperature sensor (see chapter 5F) 3. Check and replace MCB (see chapter 5K)	10
31	Cooling box temperature is too low for too long		Temperature sensor reading plus timer below - 1 °C	Lock/clear button <sup>1)</sup>		The compressor is not sveled off:  1. Compressor is defective 2. Temperature sensor is defective 3. MCB defective	1. Replace compressor 2. Check and replace temperature sensor (see chapter 5F) 3. Check and replace MCB (see chapter 5K)	10
32	Cooling box temp. sensor defective	30, 31	Temperature sensor reading <-10 °C or > 100 °C	Automatically when sensor readings are within limits		Wiring incorrect or connections defective     Temperature sensor defective     MCB defective	Check wiring or replace connections (see chapter 5K)     Replace temperature sensor (see chapter 5F)     Replace MCB (see chapter 5K)	60

3 - 5 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
40	1BIB: BIB empty >1BIB: Left BIB empty <sup>2)</sup>		BIB Empty sensor	Automatically when the sensor detects that the BIB is not empty	Error visible on all machine versions. The beep of this error is also generated when the error is reset	1. Float in B2 dosing unit defective 2. Wiring incorrect or connections defective 3. Empty sensor defective 4. MCB defective	1. Replace the product pack  2. Check wiring or replace conntections (see chapter 5K)  3. Replace empty detection assembly (see chapter 5F)  4. Replace MCB (see chapter 5K)	55
41	Reserved							
42	>1BIB; right BIB empty <sup>2)</sup>		BIB Empty sensor	Automatically when the sensor detects that the BIB is full	The beep of this error is also generated when the error is reset	Float in B2 dosing unit defective     Wiring incorrect or connections defective     Empty sensor defective     MCB defective	1. Replace the product pack  2. Check wiring or replace conntections (see chapter 5K)  3. Replace empty detection assembly (see chapter 5F)  4. Replace MCB (see chapter 5K)	55
43	1BIB: B2 defective >1BIB: left B2 defective 2)		B2 current too high or too low	Lock/clear button 1)	(locking error: remains active after it occurred)	Wiring incorrect or connections defective     MCB defective     B2 coil defective	1. Check wiring or replace connections (see chapter 5K) 2. Replace MCB (see chapter 5K) 3. Replace B2 coil (see chapter 5C)	100
44	Reserved							

3 - 6 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
45	>1BIB: right B2 defective		B2 current too high or too low	Lock/clear button 1)		Wiring incorrect or connections defective      MCB defective      B2 coil defective	1. Check wiring or replace connections (see chapter 5K) 2. Replace MCB (see chapter 5K) 3. Replace B2 coil (see chapter 5C)	100
50	Reserved							
51	Reserved							
52	Reserved							

3 - 7 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

#### **Errors product delivery system** 3.3

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
60 <sup>3)</sup>	1BIB: MAD console is not (correctly) in place		MAD console sensor and mixing bowl in pace sensors	Automatically when the sensor detects all is in place again		MAD console incorrectly positioned     Wiring incorrect and connections defective     MAD console sensor not in the correct position or defective     MCB defective	Position MAD console correctly     Check wiring or replace connections (see chapter 5K)     Position MAD console sensor correctly or replace it     Replace MCB (see chapter 5K)	
61 <sup>3)</sup>	1BIB: MAD diverting system defective or mixing bowl is not detected >1BIB: left MAD diverting system defective or left mixing bowl is not detected		Cam shaft drive cannot find home position	Automatically: mixing bowl Lock/Clear but- ton: cam shaft motor	The beep of this er- ror is also generated when the error is reset	Whipper jammed or defective     MAD console assembly      Seal defective     Mixer motor defective      Wiring incorrect or light barrier defective     MCB defective	1. Replace whipper (see chapter 5C) 2. Check and correct MAD console assembly or replace parts (see chapter 5C) 3. Replace seal 4. Replace mixer motor (see chapter 5C) 5. Check wiring or replace light barrier 6. Replace MCB (see chapter 5K)	100
62 <sup>2)</sup>	Reserved							

3 - 8 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
63 2)	>1 BIB: Right MAD diverting system defective or right mixing bowl is not de- tected		Cam shaft drive cannot find home position	Automatically: mixing bowl Lock/Clear but- ton: cam shaft motor	The beep of this er- ror is also generated when the error is reset	1. Whipper jammed or defective 2. MAD console assembly 3. Seal defective 4. Mixer motor defective 5. Wiring incorrect or light barrier defective 6. MCB defective	1. Replace whipper (see chapter 5C) 2. Check and correct MAD console assembly or replace parts (see chapter 5C) 3. Replace seal 4. Replace mixer motor (see chapter 5C) 5. Check wiring or replace light barrier 6. Replace MCB (see chapter 5K)	100

3 - 9 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

#### **Errors hygiene system** 3.4

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
71	Flushing was not executed in time		Timer	Flushing program was executed correctly		-	Reset by executing flushing program, adjust CLEANING TIME and/or DATE/TIME if required	70
73	Cleaning was not executed in time		Timer	Cleaning program was executed correctly		-	Reset by executing flushing program, adjust CLEANING TIME and/or DATE/TIME if required	71
74	Water throughput limit exceeded		Software: incremental volu- me counter	Reset of hot water throughput counter		Water throughput counter not reset	Replace water filter	10

3 - 10 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

#### 3.5 **Errors hardware and network**

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
81	UI error		No response or error reported	Reset on recovery		Wiring incorrect or defective     UIB defective     MCB defective	Check and correct wiring     Replace UIB     Replace MCB	
82	Payment module error		No response or error reported	Lock/clear button <sup>1)</sup>		Payment system enabled, but not connected.     Wiring incorrect or defective     Coin/card/waiter system not connected or defective     Power issue in payment system     Control board payment system defective     MCB defective	1. Check and correct payment settings     2. Correct or replace wiring     3. Check and connect/replace coin/card/waiter system     4. Check power unit in payment system and wiring     5. Replace control board payment system     6. Replace MCB	
83	Flavor module error		No response or error reported	Lock/clear but- ton <sup>1)</sup>		not active	not active	
84	Foamino module error		No response or error reported	Lock/clear but- ton <sup>1)</sup>		not active	not active	
85	Cold module error		No response or error reported	Lock/clear but- ton <sup>1)</sup>		not active	not active	
90	Check sum error parameter .field 1		Software	Lock/clear button <sup>1)</sup> , after initialization has indicated that the checksum is OK		The memory test of the MCB detected a memory failure.	Replace the MCB.	210
91	Check sum error parameter .field 2		Software	Lock/clear button <sup>1)</sup> , after initialization has indicated that the checksum is OK		The memory test of the MCB detected a memory failure.	Replace the MCB.	210

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

3 - 11 August 2009

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
92	Data file mis- sing in flash file system		Software	Lock/clear button <sup>1)</sup> , after initialization has indicated that the checksum is OK		Flash file system is not available     MCB circuit board is defective.	Reload the CBX file via download file from the PC service tool     Replace the MCB circuitboard.	209
95	RTC not running		Software	Reset when time and date is set in RTC	Can besetup in cleaner mode or higher.	Installation sequence not executed     MCB defective      MCB was too long un-powered     RTC defective	Set time  2. Replace MCB (see chapter 5K) 3. Set the RTC (cleaner, operator or service mode) 4. Replace the MCB	150
97	Push button is stuck		Software	Lock/clear but- ton <sup>1)</sup>	Locking of the stuck buttons	Mechanically damaged push button caps or door     Incorrect placement of the user interface PCB     Screws not tightened correctly     Micro switches on user interface PCB defective	Check button caps and door and replace them if necessary     Correct placement of user interface PCB     Tighten screws     Replace user interface PCB (see chapter 5K)	100

#### **Errors payment system** 3.6

No.	Description	Over- rules	Set condition	Reset condition	Remarks	Cause	Remedy	Priority
200	Reboot							

3 - 12 August 2009

<sup>&</sup>lt;sup>1)</sup> Errors are reset by pressing the Lock/clear button in cleaner-, operator-, service- or development mode is shown <sup>2)</sup> Not valid for Cafitesse 100 NG <sup>3)</sup> Valid for Cafitesse 120 NG only

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## 4. Programming

#### 4.1 General

The Cafitesse 100 NG software provides two kinds of service programming for the dispenser:

- Programming via Service Interface using the USB service stick and the operating panel of the dispenser
- Programming via Windows Based Service Device (WBSD)

This manual contains the following descriptions:

- · Programming via Service Interface
- · Entry of the WBSD programming
- · Overview of the software settings

For the programming via WBSD please refer to a separate programming manual.



The service authorization level overrules the operator authorization level, i.e. the service technician can enable or disable functions for the operator.

# 4.2 Start the programming via service interface

Insert the USB service key (1) into the USB connector (2) of the dispenser. (Fig 1)

This immediately starts the service programming mode, which offers a series of functions.

Operating panel in the service mode (fig. 2):

- a. Display
- b. Three preselection buttons
- c. Arrow button ,UP' ▲ scroll up or increase input values
- d. Arrow button ,DOWN' ▼ scroll down or decrease input values
- e. Input button ← confirms or activates the input
- f. STOP button navigate back or hold down for 2 seconds to display the start menu

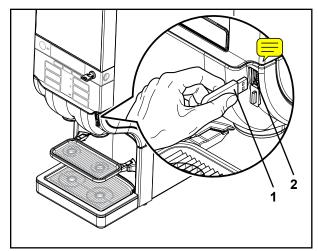


Fig. 1

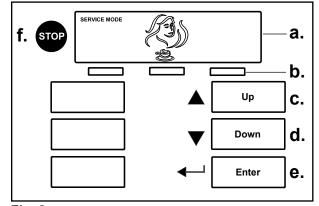


Fig. 2

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# 4.3. Programming via service interface

# 4.3.1 Upgrading and downgrading platform packages

The Cafitesse NG software allows you to upgrade and downgrade platform package versions after inserting a USB stick with service access.

You can synchronize the platform packages from the USB-stick to the dispenser and vice versa.

 Insert a USB stick with service access into the USB connection on the dispenser (fig. 2).

#### Upgrading

The service mode invokes automatically on the display after inserting the USB stick (fig. 3). When the USB stick version is **more recent** than the resident package version the following text will scroll in the message line:

«PRESS **←** TO UPGRADE»

1. Press the input button. The following message appears on the display:

«PRESS **←** TO START UPGRADE»

2. Press the input button. The upload starts.

#### **Downgrading**

The service mode invokes automatically on the display after inserting the USB stick (fig. 4). When the USB stick version is **older** than the resident package version the following text will scroll in the message line:

«PRESS ← TO DOWNGRADE»

1. Press the input button. The following message appears on the display:

«THE NEW VERSION IS OLDER, ARE YOU SURE? PRESS ← FOR YES»

2. Press the input button. The following message appears on the display:

«PRESS ← TO START DOWNGRADE»

3. Press the input button. The upload starts.

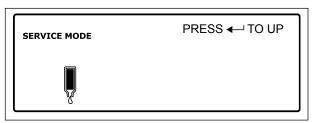


Fig. 3

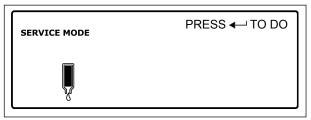


Fig. 4

# ion

# 4.3.2 Menu navigation

Seven menus are available. They are named as follows (fig. 5):

- COUNTERS read out counter levels
- VOLUME change volume per cup
- STRENGTH change drink strength
- DATE / TIME set time
- CLEANING DAYS set cleaning intervals
- ECO SETTINGS optimize power consumption
- **TELEPHONE** # enter telephone numbers for service and operator

When the service mode has started, the menu «COUNTERS» is displayed in the message line (fig. 6).

- a. Service mode is active.
- b. Arrow buttons **▼ △** can be used to activate the menus before and after the current menu.

When you have entered a menu, a message text on the display shows the next steps.

Note: If the text is too long, it will scroll

from left to right through the mes-

sage line.

# 4.3.3 Counter readings

In the «COUNTERS» menu, you have various possibilities to read out the drink counters, e.g.:

- · Total number of drinks
- · Subtotals per drink button
- Subtotals "VOLUME" and "ICED" per drink button
- Total number of "ICED" and "HOT" drinks

#### Total number of drinks

In the service mode, press the input button 

to enter the «COUNTERS» menu (fig. 7).

On the display appears the total number of drinks

TOTAL DRINKS 1234567

in turn with the message

SELECT DRINK

- **COUNTERS**
- **♦ VOLUME**
- **♦** STRENGTH
- **♦** DATE/TIME
- **CLEANING DAYS**
- **♦** ECO SETTING
- **♦** TELEPHONE #

Fig. 5

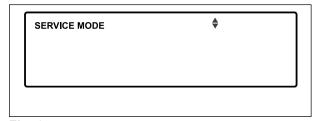


Fig. 6

- **♦** COUNTERS **←**
- **♦ VOLUME**
- **♦** STRENGTH
- **♦** DATE/TIME
- **♦ CLEANING DAYS**
- **♦** ECO SETTING
- **♦** TELEPHONE #

Fig. 7

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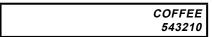
For more detailed counter readings you can now press:

- a drink button, e.g. "coffee" to display the counter reading of all coffee drinks
- a preselection button, e.g. "VOLUME" to display the counter reading of all small, medium, or large drinks

#### Subtotals per drink button

• In the «COUNTERS» menu, press a drink button, e.g. ,coffee'.

The number of deliveries for the selected drink button, e.g. ,coffee', appears on the display.



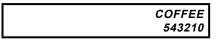
You now have the choice to press:

- the STOP button to go back to the higher level of the «COUNTERS» menu.
- another drink button to display the respective counter reading for this button
- a preselection button ("VOLUME" or "ICED") for a more detailed counter readings, e.g. the number of large coffee drinks.

# Subtotals "VOLUME" and "ICED" per drink button

 In the «COUNTERS» menu, press a drink button, e.g. ,coffee<sup>6</sup>.

The number of deliveries for the selected drink button, e.g., coffee', appears on the display:



2. Press the preselection button "VOLUME"

The cup icon and the counter reading for the ,small' variation of the drink, e.g. small coffee, appear on the display.



Note:

If you continue to press the preselection button "VOLUME", the display shows cyclic counter readings for the middle, large, total, and small drinks 3. Press the preselection button "ICED"

The "ICED" icon and the counter reading for the ,iced', ,small' variation of the drink, e.g. iced small coffee, appear on the display:



Note:

If you continue to press the preselection button "ICED", the display shows cyclic counter reading for the hot, total, and iced drinks in combination with the respective volume selection.

Or you have the choice to press:

- the STOP button to go back to the higher level of the «COUNTERS» menu.
- another drink button to display the respective counter readings for this button.

#### Total number of iced and hot drinks

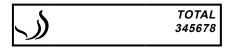
1. In the «COUNTERS» menu, press the preselection button "ICED"

The "ICED" icon and the counter reading for the total number of iced drinks appear on the display:

44.	TOTAL
<del>                                    </del>	789012

2. Press again the preselection button "ICED"

The "HOT" icon and the counter reading for the total number of hot drinks appear on the display:



Press the preselection button "ICED" again to return to the total counter reading of all drinks.

# 4.3.4 Changing cup volumes

In the «VOLUME» menu, you can change the cup volumes for each type by max. +10% or -10%.

The following messages appear in turn on the display:

DRINK VOLUME

and

# SELECT DRINK

2. Press a drink button for a volume change of the respective drink, e.g. coffee

The name of the drink and the current volume setting will be shown on the display:

- 3. Increase ▲ or decrease ▼ the cup volume using the arrow buttons.
- 4. Confirm the required value with the input button 

  ♣. The new cup volume will be accepted immediately for the selected drink.

## Preselection "ICED"

- 1. In the «VOLUME» menu, press a drink button for a volume change of the respective drink, e.g. coffee
- 2. Then press the preselection button "ICED"

The "ICED" icon and the current volume setting for will be displayed:



- 3. Increase ▲ or decrease ▼ the cup volume using the arrow buttons.
- 4. Confirm the required value with the input button 

  ♣. The new cup volume will be accepted immediately for the selected drink.

Note: The preselection button "ICED" has a toggle function in the

«VOLUME» menu.

- **♦** COUNTERS
- **♦ VOLUME** ←
- **♦** STRENGTH
- **♦** DATE/TIME
- **CLEANING DAYS**
- **♦** ECO SETTING
- **♦** TELEPHONE #

Fig. 8

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# 4.3.5 Changing drink strength

In the «STRENGTH» menu, you can change the cup volumes for each type by max. +10% or -10%.

The following messages appear in turn on the display:

# DRINK STRENGTH

and

#### SELECT DRINK

2. Press a drink button for a change of drink strength for the respective drink, e.g. coffee

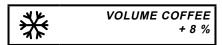
The name of the drink and the current strength setting will be shown on the display:

- 3. Increase ▲ or decrease ▼ the drink strength using the arrow buttons.
- 4. Confirm the required value with the input button ♣. The new recipe will be accepted immediately for the selected drink.

## Preselection "ICED"

- 1. In the «STRENGTH» menu, press a drink button for a change of drink strength for the respective drink, e.g. coffee.
- 2. Then press the preselection button "ICED"

The "ICED" icon and the current strength setting will be displayed:



- 3. Increase ▲ or decrease ▼ the drink strength using the arrow buttons.
- 4. Confirm the required value with the input button 

  ♣. The new recipe will be accepted immediately for the selected drink.

Note: The preselection button "ICED" has a toggle function in the

«STRENGTH» menu.

- **♦** COUNTERS
- **♦ VOLUME**
- **♦** STRENGTH ←
- **♦** DATE/TIME
- **†** CLEANING DAYS
- **♦** ECO SETTING
- **♦ TELEPHONE** #

Fig. 9

# 4.3.6 Setting date and time

You can set the date with month/day/ year and time in the «DATE / TIME» menu. (The time setting needs to be adjusted at the start and end of the daylight saving time.)

Note:

If the dispenser has been shut down for longer periods, the date and time must be reset, so that the dispenser and the programmed cleaning cycles are reactivated.

- 2. The date and time settings are shown on the display. The option «MONTH» is active and flashing:

**JUN** 29 2007 10:10

- 2. Use the arrow buttons **▼**▲ to select the correct month (JAN DEC).

The option «MONTH» stays lit and the option «DAY» starts to flash:

JUL **29** 2007 10:10

- 4. Use the arrow buttons **▼**▲ to select the correct day (1-31).

The option «DAY» stays lit and the option «YEAR» starts to flash:

JUL 06 **2007** 10:10

- 6. Use the arrow buttons **▼ ▲** to select the correct year.
- 7. Confirm with the input button -.

The option «YEAR» stays lit and the option «HOUR» starts to flash:

JUL 06 2009 ¶@:10

- 8. Use the arrow buttons **▼**▲ to select the correct hour.

- **♦** COUNTERS
- **♦ VOLUME**
- **♦** STRENGTH
- **♦** DATE/TIME **←**
- CLEANING DAYS
- **♦** ECO SETTING
- **♦** TELEPHONE #

Fig. 10

The option «HOUR» stays lit and the option «MINUTES» starts to flash:

JUL 06 2009 13:**¶0** 

- 10.Use the arrow buttons **▼ △** to select the correct minutes.

The new settings for date and time will now be displayed continuously (without flashing) on the display:

JUL 06 2009 13:48

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#### 4.3.7 Setting the cleaning days

It is necessary to clean the dispenser at least once a week. Use the «CLEANING DAYS» menu to set which weekday you want to clean or flush the dispenser. The flushing settings are optional. In the «CLEANING DAYS» main menu, two submenus can be selected using the arrow buttons

#### **▼▲**:

- «CLEAN»
- «FLUSH»

DAYS» menu (fig. 11).

#### Set the day(s) for "CLEAN"

1. Use the arrow buttons **▼**▲ to navigate to submenu«CLEAN».

The status of the selected cleaning days is shown on the display:

Sun Mon Tue Wed Thu Fri **♦** CLEAN:

2. Press the input button 4 to enter the «CLEAN» submenu.

The weekdays Sun - Sat are displayed. The cursor icon for cleaning - is positioned under Monday and flashes:

Sun Mon Tue Wed Thu Fri CL. SET: 

- 3. Use the arrow buttons **▼**▲ to navigate to the weekday on which cleaning should take place.
- (flashing -) day for cleaning.

The cursor icon - under the selected day will be displayed continuously.

Note: When you press the input

button  $\blacktriangleleft$  again, the day will be deselected and the cursor icon moves to the next day.

5. Select another weekday if requested by repeating steps 3. and 4.

Note: When you reenter the «CLEAN» submenu, the previous day for

cleaning is no longer selected. The default Monday is activated and selected, in case you leave the

menu without setting.

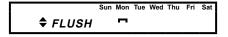
- COUNTERS
- **\$ VOLUME**
- STRENGTH
- DATE/TIME
- **CLEANING DAYS** ←
- **ECO SETTING**
- TELEPHONE #

Fig. 11

# Set the day(s) for "FLUSH"

1. Use the arrow buttons **▼**▲ to navigate to submenu«FLUSH».

The status of the selected cleaning days is shown on the display:



submenu.

The weekdays Sun - Sat are displayed. The cursor icon for flushing — is positioned under Monday and flashes:

Sun Mon Tue Wed Thu Fri FL. SET:

- 3. Use the arrow buttons **▼**▲ to navigate to the weekday on which flushing should take place.
- (flashing -) day for flushing.

The cursor icon - under the selected day will be displayed continuously.

Note: When you press the input

> button  $\leftarrow$  again, the day will be deselected and the cursor icon moves to the next day.

5. Select another weekday if requested by repeating steps 3. and 4.

Note:

Several days for flushing can be

defined in sequence.

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# 4.3.8 ECO settings

You can optimise the power consumption of the dispenser in the menu «ECO SETTING». You can reduce the temperature of the boiler. These settings only apply to those times when the dispenser is not used (e.g. overnight). In the «ECO SETTING» menu, you can select four sub menus using the arrow buttons ▼▲:

- «ECO ENABLE/DISABLE»
- «ECO START»
- «ECO END»
- «ECO TEMPERATURE»

## Enable/disable energy saving mode (ECO)

The status (ENABLED/DISABLED) is shown on the display, e.g.:

#### ECO DISABLED

The status (ENABLED/DISABLED) is flashing on the display:

# ECO **DISABLED**

- 2. Use the arrow buttons **▼**▲ to select the status «ENABLED» or «DISABLED».

The selected status will be displayed continuously, e.g. ENABLED:

#### **ECO ENABLED**

4. Press the STOP button to return to the main menu.

- **♦** COUNTERS
- **♦ VOLUME**
- **♦** STRENGTH
- **♦** DATE/TIME
- **†** CLEANING DAYS
- **♦** ECO SETTING **←**
- **♦** TELEPHONE #

Fig. 12

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# Setting the start time

- status: «ECO ENABLED»
- Use the arrow buttons ▼▲ to navigate to submenu «ECO START».

The ECO START time is shown on the display.

The option "Hour" flashes and is active:

ECO START 24:15

- 3. Use the arrow buttons **▼**▲ to select the correct time (hours).

The option "hours" stays lit and the option "minutes" starts to flash:

ECO START 22:¶5

- 5. Use the arrow buttons **▼ △** to select the correct time (minutes).

The new time setting will now be displayed continuously on the display.

# Setting the end time

- status: «ECO ENABLED»
- Use the arrow buttons ▼▲ to navigate to submenu «ECO END».

The ECO END time is shown on the display.

The option "Hour" flashes and is active:

ECO END **05**:55

- 3. Use the arrow buttons **▼** ▲ to select the correct time (hours).

The option "hours" stays lit and the option "minutes" starts to flash:

ECO END 06:**5**5

- 5. Use the arrow buttons **▼** ▲ to select the correct time (minutes).

The new time setting will now be shown continuously on the display.

 Press the input button ← again, if you would like to restart the setting.

#### Setting the temperature

- · status: «ECO ENABLED»
- Use the arrow buttons ▼▲ to navigate to sub menu «ECO TEMP».

The ECO TEMPERATURE is shown on the display.

ECO TEMPERATURE 63 °C / 145 °F

The temperature setting then flashes on the display:

ECO TEMPERATURE
63 % / 145 F

- 3. Use the arrow buttons **▼**▲ to select the desired temperature.

The new temperature will be shown continuously on the display, e.g.:

ECO TEMPERATURE 75 °C / 167 °F

Note: When the energy saving mode

is active, the start display shows

«ECO».

**ECO** 

# 4.3.9 Setting telephone numbers

You can set the telephone numbers of operator and service in the «TELEPHONE #» menu. You can also select whether the numbers should be shown on the display. In this case the operator and service numbers are shown, if e.g.

- · cleaning is required
- the product pack is empty
- · there are errors

In the «TELEPHONE #» main menu, four sub-menus can be selected using the arrow buttons ▼▲:

- «SHOW OPERATOR NUMBER»
- «SHOW SERVICE NUMBER»
- «OPERATOR NUMBER»
- «SERVICE NUMBER»

The status OPERATOR NUMBER is shown on the display:

#### **OPERATOR NR** : 030123457

#### Activate/deactivate operator number

- Use the arrow buttons ▼▲ to navitate to the sub menu «SHOW OPERATOR NR».

The display shows the settings for «Y» (Yes) or «N» (No).«Y» or «N» flashes and is active:

# SHOW OPERATOR NR : N

- Use the arrow buttons ▼▲ to select «Y» to activate the number display or «N» to deactivate the number display.

The new setting will then be displayed continuously on the display, e.g.:

#### SHOW OPERATOR NR: Y

- **COUNTERS**
- **♦ VOLUME**
- **♦** STRENGTH
- **♦** DATE/TIME
- **CLEANING DAYS**
- **♦** ECO SETTING
- **♦** TELEPHONE # ←

Fig. 13

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#### Activate/deactivate service number

- Use the arrow buttons ▼▲ to navigate to the sub menu «SHOW SERVICE NR».

The display shows the settings for «Y» (Yes) or «N» (No).«Y» or «N» flashes and is active:

# SHOW SERVICE NR : N

- 3. Use the arrow buttons ▼▲ to select «Y» to activate the number display or «N» to deactivate the number display.

The new setting will then be displayed continuously on the display, e.g.:

#### SHOW SERVICE NR: Y

#### Enter the operator number

- 1. Use the arrow buttons **▼**▲ to navigate to the sub-menu «OPERATOR NR».

The display shows the operator telephone number. The first digit is active and flashes:

Note:

O = operator, S = service

- 3. Enter the first digit using the arrow buttons ▼▲.

The first digit is displayed continuously, the second digit is activated and starts flashing.

#### O: 5\\$01234567

- 5. Repeat steps 3. and 4. until you have input the last digit of the telephone number.
- 6. Confirm the complete telephone number with the input button ←.
- Press the input button ← again, if you would like to restart the setting.

#### Enter the service number

- Use the arrow buttons ▼▲ to navigate to the sub-menu «SERVICE NR».

The display shows the operator telephone number. The first digit is active and flashes:

# S: 318051234567

Note:

O = operator, S = service

- 3. Enter the first digit using the arrow buttons ▼▲.

The first digit is displayed continuously, the second digit is activated and starts flashing.

#### S: 0¶8051234567

- 5. Repeat steps 3. and 4. until you have input the last digit of the telephone number.
- 6. Confirm the complete telephone number with the input button ←.

# 4.4 Start the programming via Windows Based Service Device

Using the service interface of the Cafitesse 100 dispenser, the service technician makes the necessary settings for running the dispenser. He configures the operator interface, runs different tests, makes the dispenser-specific settings, etc.

 Insert the USB plug (1) of the Windows Based Service Device into the USB connector (2) of the dispenser (fig. 14).

The dispenser immediately starts the Service programming mode with the WBDS (fig. 15).

The following chapter shows the possible settings you can do using the WBDS, such as recipe settings, settings for the operator access, date and time settings, and payment settings.

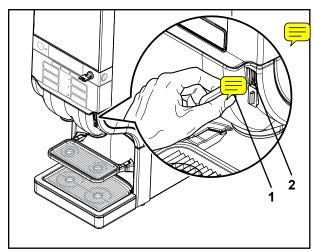


Fig. 14

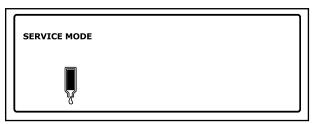


Fig. 15

# 4.5 Software settings

## Main Menu overview

**⋢**—Errors

**⊡**—Counters

Drink settings

Time & events

中—Water system

General settings
Display options

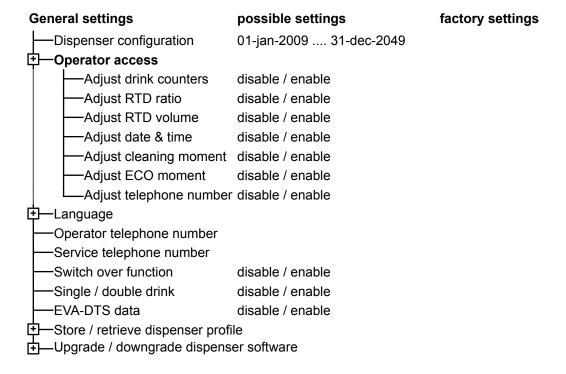
—Payment settings

<u>⊕</u>—Testing

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Drink settings	possible settings	factory setting
⊕—Button selection screen		
—Drink button	enable / disable	
—Drink type	portioned / free flow	
—Hot recipe	Coffee,	
Volume small	0 ml10000 ml	
—Volume medium	0 ml10000 ml	
Volume large	0 ml10000 ml	
—Volume ratio 1	20 %100 %	
Ingredient ratio 1 - mild	2.6, 3.2, 599	
Ingredient ratio 1 - normal	2.6, 3.2, 599	
Ingredient ratio 1 - strong	2.6, 3.2, 599	
Volume ratio 2	20 %80 %	
—Ingredient ratio 2	2.6, 3.2, 599	
—Flavorit A	0, 1, 2,, 8	
—Flavorit A delay	0 %100 %	
—Flavorit A volume	0 %5 %	
—Flavorit B	0, 1, 2,, 8	
—Flavorit B delay	0 %100 %	
—Flavorit B volume	0 %5 %	
—Cold recipe	Coffee	
Volume small	0 ml10000 ml	
—Volume medium	0 ml10000 ml	
—Volume large	0 ml10000 ml	
—Volume ratio	20 %100 %	
Ingredient ratio 1 - mild	2.6, 3.2, 599	
Ingredient ratio 1 - normal	2.6, 3.2, 599	
Ingredient ratio 1 - strong	2.6, 3.2, 599	
—Volume ratio 2	20 %80 %	
—Ingredient ratio 2	2.6, 3.2, 599	
—Flavorit A	0, 1, 2,, 8	
—Flavorit A delay	0 %100 %	
—Flavorit A volume	0 %5 %	
—Flavorit B	0, 1, 2,, 8	
—Flavorit B delay	0 %100 %	
Flavorit B volume	0 %5 %	

Time & Events	possible settings	factory settings
—Current date	01-jan-2009 31-dec-2049	
—Current time	00:00 - 12:00 or - 23:59	
—Format time representation	12 h / 24 h	
Ф—Cleaning moment		
Cleaning mode	show / compulsory	
—Sunday	enable / disable	
—Monday	enable / disable	
—Tuesday	enable / disable	
Wednesday	enable / disable	
—Thursday	enable / disable	
Friday	enable / disable	
—Saturday	enable / disable	
—Sunday	enable / disable	
Flavorit	weekly / monthly	
—Clean shot	enable / disable	
Standby time	00:00 - 12:00	
Ė—ECO moment		
ECO mode	disable / enable	
—Start time	00:00 - 12:00 or - 23:59*	
—End time	00:00 - 12:00 or - 23:59*	
Boiler ECO temperature	0 °C - 96 °C	
Cleaning moment  Cleaning mode  Sunday  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Saturday  Sunday  Flavorit  Clean shot  Standby time  Clean shot  Standby time  Clean shot  Standby time  The CO mode  Start time  End time	show / compulsory enable / disable onable / disable enable / disable onable / enable	



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Display options	possible settings	factory settings
Volume unit     Temperature unit     Show time     Show cooling temperature     Show hot warning     Show operator tel. numbers     Show service tel. numbers     Cold preselection option     Strength preselection default	ml / l, oz / gal  °C / °F  disable / enable  disable / enable	ractory settings

Payment settings	possible settings	factory settings
—Payment	disable / enable	
—Normal operation	free vend mode / paid mode	
—Free vend key switch	disable / enable	
—Туре	parallel - coin acceptor, MDB - coin changer, MDB - E-cash, waiter system	
Parallel - coin acceptor	disable /enable	
∯—MDB - coin changer	disable / enable	
ф—MDB - E-cash	disable / enable	
<b>⊞</b> —Waiter system	disable / enable	

Payment settings	possible settings	factory settings
Parallel - coin acceptor  Button selection screen  Price volume small-hot	0999	
Price volume medium-hot Price volume large-hot Price volume small-cold Price volume medium-cold Price volume large-cold	0999 0999 0999 0999	
	inhibit, 0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0.05, 0.10, 0.20, 0.50, 1.00, 2.00	
Coin value line 3  Coin value line 4  Coin value line 5  Coin value line 6  # decimal in UI	0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0.05, 0.10, 0.20, 0.50, 1.00, 2.00 0, 1, 2, 3	
—Decimal point —Inhibit coins	0.000, 00.00, 000.0. 0000 064	

Payment settings	possible settings	factory settings
—MDB - coin changer		
□     □     Button selection screen		
Price volume small-hot	0999	
Price volume medium-hot	0999	
Price volume large-hot	0999	
Price volume small-cold	0999	
Price volume medium-cold	0999	
Price volume large-cold	0999	
中—Audit info		
中—Manual coins filling		
中—Collect cashbox money		
—# decimal in UI	0, 1, 2, 3	
—Decimal point	0.000, 00.00, 000.0. 0000	
—Display	none, local	
—Vend mode	single, multi	
—Max. coin credit	01000000	
—Max. change	01000000	
—Low change inhibit	0255	
-Inhibit coins	0255	
—Buttons on coin system	disable / enable	
—Force vend	disable / enable	
Pay out change	to overpay / keep in credit	

Payment settings	possible settings	factory settings
+ MDB - E-cash  + Button selection screen - Price volume small-hot	0999	
—Price volume medium-hot —Price volume large-hot	0999 0999	
—Price volume small-cold —Price volume medium-cold —Price volume large-cold	0999 0999 0999	
+	0, 1, 2, 3	
—Show E-cash credit —Vend mode —Decimal point	No, Yes single, multi 0.000, 00.00, 000.0. 0000	
—Display —Mode	none / local real / index	
L—Refundability	enable / disable	

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Payment settings	possible settings	factory settings
⊥ ±MDB - E-cash		
CCI mode	debit / credit	
Price line button 1-1	1100	
Price line button 1-2	1100	
Price line button 1-3	1100	
—Price line button 2-1	1100	
—Price line button 2-2	1100	
Price line button 2-3	1100	
Price line button 3-1	1100	
Price line button 3-2	1100	
Price line button 3-3	1100	
Price line button 4-1	1100	
Price line button 4-2	1100	
Price line button 4-3	1100	

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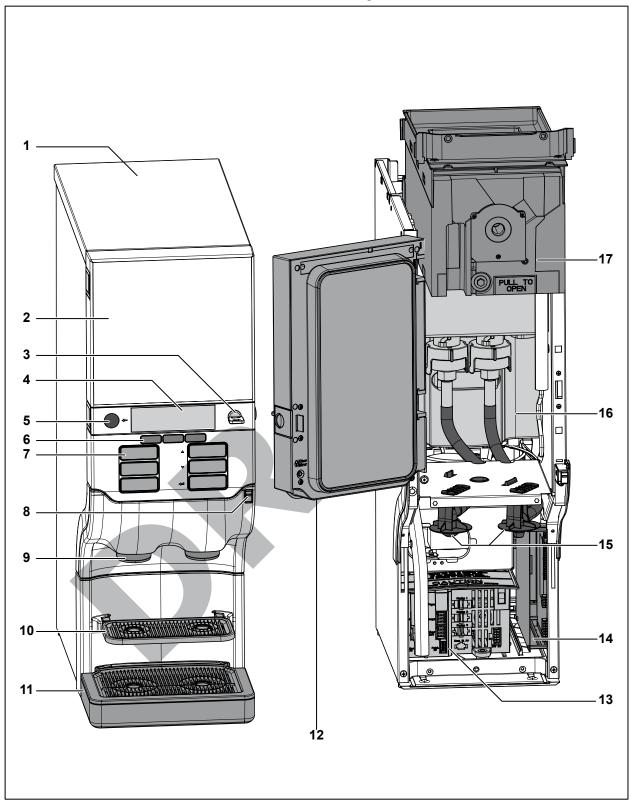
# **Contents**

Overview of the dispenser and the components	
Overview of the Cafitesse 110NG dispenser	5.1
Overview of the Cafitesse 120NG dispenser	5.2



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# 5.1 Overview Cafitesse 110NG dispenser



Legend:

1 Dispenser cover

2 Dispenser do

3 Lock incl. key

4 Display

5 STOP button

6 Preselection buttons

7 Drink buttons

8 USB connector

9 Drink outlets

10 Cup tray

11 Drip tray and drip grid

12 Dispenser door - open

13 Power pack

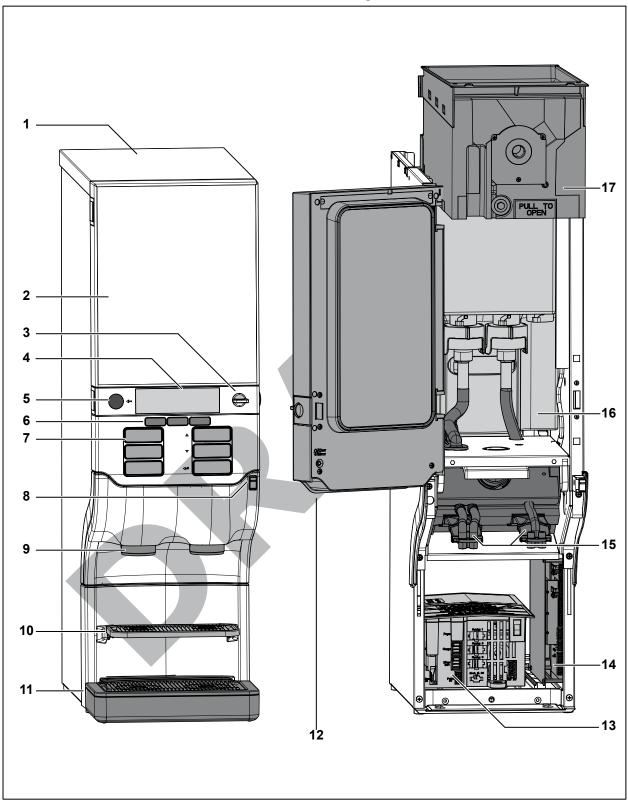
14 Main Control Board - MCB

15 Fluid treatment parts

16 Boiler

17 Cooling compartment, tilt up

# 5.2 Overview Cafitesse 120NG dispenser



# Legend:

- 1 Dispenser cover
- 2 Dispenser do
- 3 Lock incl. key
- 4 Display
- 5 STOP button
- 6 Preselection buttons
- 7 Drink buttons
- 8 USB connector
- 9 Drink outlets
- 10 Cup tray
- 11 Drip tray and drip grid
- 12 Dispenser door open
- 13 Power pack
- 14 Main Control Board MCB
- 15 MAD foam unit
- 16 Boiler
- 17 Cooling compartment, tilt up

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# Water system ightharpoonup



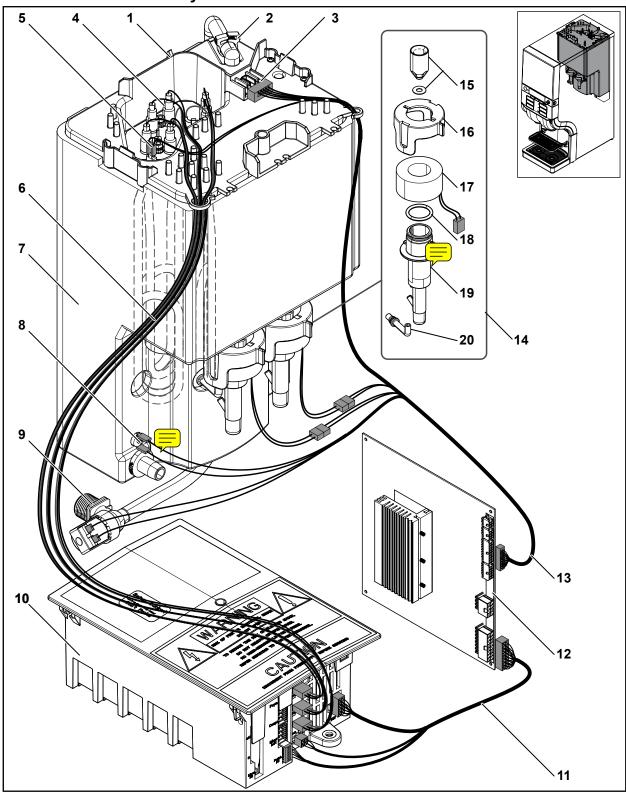
# A.1 Adjustments

Outlet valves	Open all outlet valves completely and calibrate them. Calibration via software	<b>=</b>
Water temperature	Adjustable via software	

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#### **A.2 Disassemblies**

#### A.2.1 Overview water system



Legend:

- 1 Boiler lid
- 2 Inlet hose
- 3 Level sensor
- 4 Heating elements
- 5 Temperature sensor
- 6 Cable harn. heating elements
- 7 Boiler housing
- 8 Overboil sensor
- 9 Inlet valve
- 10 Power pack
- 11 Cable harn. MCB power pack
- 12 Main Control Board
- 13 Cable harn. boiler
- 14 Outlet valve
- 15 Plunger incl. lip seal
- 16 Holder water coil
- 17 Water coil incl. cable harness
- 18 Sealing ring 19 Plunger fit incl. nozzle
- 20 Convection hose

#### A.2.2 Draining the water out of the boiler

WARNING:

The water in the boiler is hot. Beware of the risk of scalding. Keep your hands and other parts of your body away from the hot water.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- · Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets (1) on the cover coolbox (2) (fig. 1)
- Pull down the cover fluid treatment (3) (fig. 2).
- Undo 2 releasable rivets (4) at the splash panel (5) and remove the overflow hose (6) on the inside of the splash panel (fig. 2).
- · Remove the splash panel (5) together with the cover fluid treatment (fig. 2).
- Take the boiler drain tube (7) out towards the front of the dispenser (fig. 3).
- · Place a sufficiently large container (capacity of at least 12 litre / 3.2 US Gal.) underneath (fig. 3).
- Remove the plug (8) on the drain tube and let the water flow into the container (fig. 3).



ATTENTION: After draining the water carefully replug the drain tube of the boiler. Once all service and/or maintenance work has been completed replace the drain tube by fastening it.

Note:

Due to the high temperatures of the boiler's components, it is advisable to allow the boiler to cool down for several minutes or to rinse the boiler by refilling cold water and draining it before commencing any work.

# On assembly, note the following:

Take care to put the overflow hose back into the slot of the splash panel.

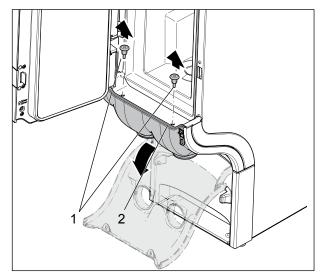


Fig. 1

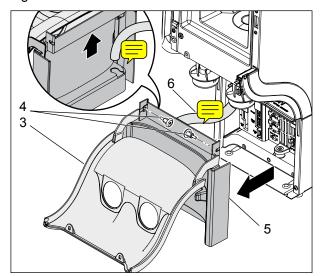


Fig. 2

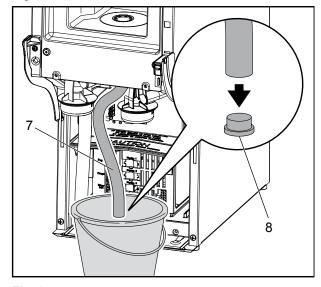


Fig. 3

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# A.2.3 Disassembly of the outlet valves and the overboil sensor

WARNING: The water in the boiler is hot.

Beware of the risk of scalding. Keep your hands and other parts of your body away from

the hot water.

*Note:* Due to the high temperatures

of the boiler's components, it is advisable to allow the boiler to cool down for several minutes or to rinse the boiler by refilling cold water and draining it before commencing

any work.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment and drain the boiler (see chapter A.2.2).
- Unscrew the door stop (1) at the togg. 1).
- Undo the 3 screws (2) on the dispenser cover plate (fig. 1).
- Remove the dispenser cover plate (fig. 1).

# On assembly, note the following:

Hook the dispenser cover plate at the rear into the corresponding grip (3) (fig. 2).

## Tilt up the cooling compartment

- Undo the 2 screws (4) on the front of the cooling compartment (5) (fig. 3).
- Tilt up the complete cooling compartment (fig. 3).

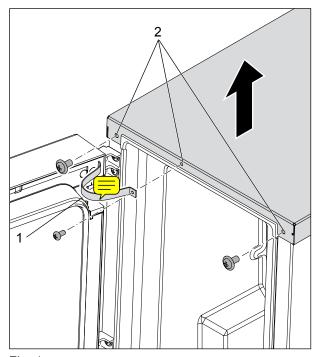


Fig. 1

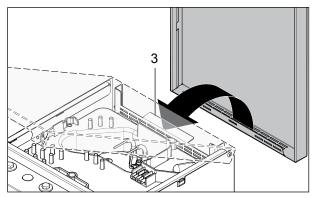


Fig. 2

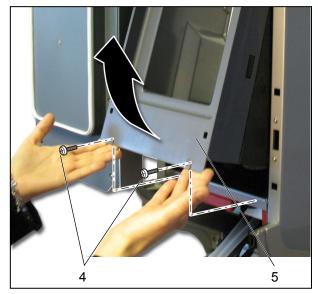


Fig. 3

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Extract the 2 bolts (6) from the cavity on each side of the inside wall and plate in the adjacent hole to support the cooling compartment (fig. 4).

# Disassembly of the outlet valves 🤚



- Unplug the cable harness (7) of the respective outlet valve at the intermediate connection (fig. 5).
- Remove the convection hose (8) beneath the respective outlet valve (fig. 6).
- Pull off the breather hose (9) from the boiler lid (fig. 6).
- Pull off the outlet hoses (10) of the respective outlet valve (fig. 6).
- Turn the respective valve (11) counterclockwise and downwards and take it out of the bracket (fig. 7).

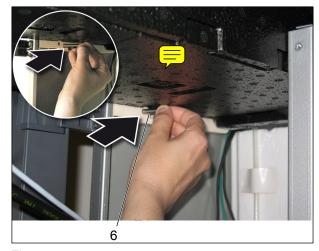


Fig. 4

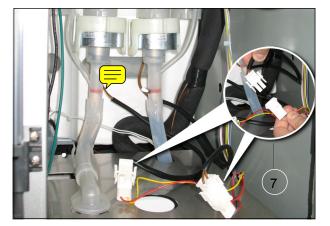


Fig. 5

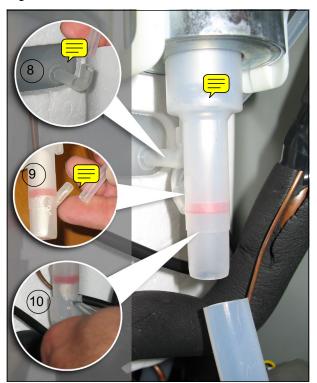


Fig. 6

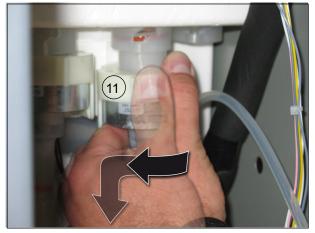


Fig. 7

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- Turn the valve upside down and let the plunger fall into your hand (15) (fig. 8).
- Loosen the clips (12) to unfix the water coil (13) (fig. 8).

## ATTENTION:

Do not use tools with sharp edges for disassembling the o-ring. The seat of the ring can be damaged, this results in leakage.

• Remove the o-ring (14) from the plunger fit (15) (fig. 8).

#### On assembly, note the following:

#### ATTENTION:

To avoid overflow take care that the convection hose (8) (fig. 6) is connected back to the respective outlet valve.

Make sure to align the slot (16) of the fixation (17) with the extrusion on the valveflange (fig. 8).

# Disassembly of the overboil sensor



- Undo the flat connectors from the overboil sensor (18) (fig. 9).
- · Rotate the overboil sensor counterclockwise and then remove it (fig. 9).

Note:

The reassembly is carried out in reverse order.

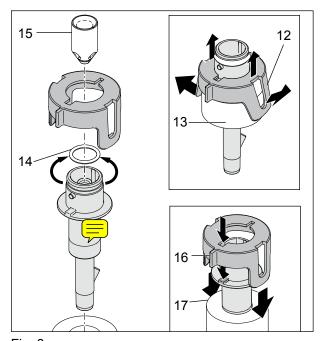


Fig. 8

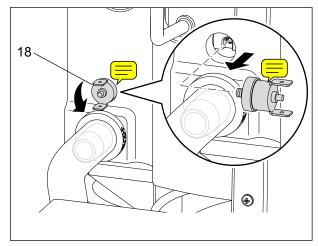


Fig. 9

# A.2.4 Disassembly of the temperature sensor and the level sensor

WARNING: The water in the boiler is hot.

Beware of the risk of scalding. Keep your hands and other parts of your body away from

the hot water.

Note: Due to the high temperatures of the

boiler's components, it is advisable to allow the boiler to cool downfor several minutes or to rinse the boiler by refilling cold water and draining it before commencing any work.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and **open** the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.
- Unscrew the door stop at the top (see chapter A.2.3).
- Undo the 2 screws on the dispenser cover plate (see chapter A.2.3).
- Remove the dispenser cover plate (see chapter A.2.3).

#### On assembly, note the following:

Hook the dispenser cover plate at the rear into the corresponding grip (see chapter A.2.3).

#### Removal of the temperature sensor

 Undo the 2 flat connectors (2) (fig. 1) and pull the temperature sensor (3) out of its seal (fig. 2).

#### Removal of the level sensor

F

Note: On assembly, make sure that the

electrodes are placed in the position, see below. Otherwise the water level can not be correctly detected.



• Undo the cable connection of the level sensor (1) (fig. 1) and pull the 3 electrodes (4) with the electrode bridge out of the boiler lid (fig. 3).

Note: The reassembly is carried out in

reverse order.

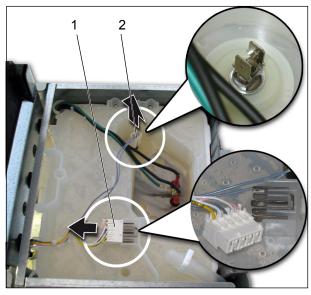


Fig. 1

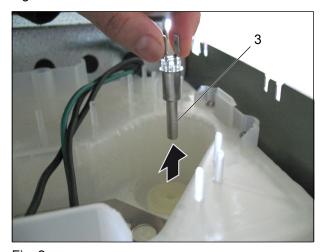


Fig. 2

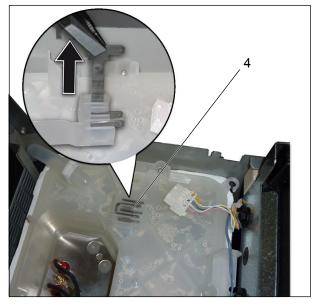


Fig. 3

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# A.2.5 Disassembly of the boiler lid and the heating elements

WARNING: The water in the boiler is hot.

Beware of the risk of scalding. Keep your hands and other parts of your body away from

the hot water.

Note: Due to the high temperatures

of the boiler's components, it is advisable to allow the boiler to cool down for several minutes or to rinse the boiler by refilling cold water and draining it before commencing

any work.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment and drain the boiler (see chapter A.2.2).
- Remove the plug(s) of the cable harness(es) heating elements (1) from the power pack (fig 1).
- Unscrew the door stop at the top (see chapter A.2.3).
- Undo the 3 screws on the dispenser cover plate (see chapter A.2.3).
- Remove the dispenser cover plate and turn up the frame (2) (fig. 2).

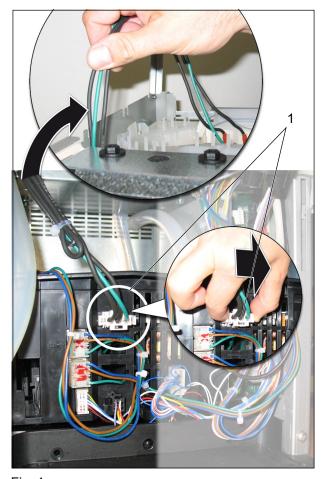


Fig. 1

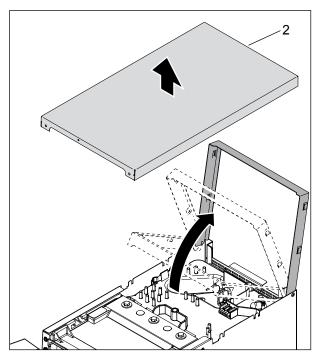


Fig. 2

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- Undo the 2 screws on the front of the cooling compartment (see chapter A.2.3).
- Tilt up the complete cooling compartment (see chapter A.2.3).
- Extract the 2 bolts from the cavity on each side of the inside wall and place it in the adjacent hole to support the cooling compartment (see chapter A.2.3).
- Pull the cable harness(es) heating elements upwards to the boiler lid (fig. 1).
- Undo the 2 flat connectors of the temperature sensor (see chapter 2.4).
- Remove the connector from the level sensor (see chapter 2.4).

# Disassembly of the boiler lid

- Undo the 4 screws (4) on the boiler lid (fig. 3).
- Remove the hose clamp and undo the winlet hose (5) from the boiler lid (fig. 3).
- Unfix the 2 clamps on the boiler lid and remove the boiler lid.

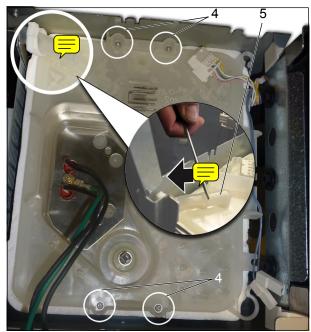


Fig. 3

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## Disassembly of the heating element

- Undo nut (6), lock washer (7) and ground cable (8) from the earthing sheet heating element (fig. 6).
- Undo the black cables from the plug with the special tool (fig. 7).
- Remove the heating element (9) and pull the black cables (10) through the boiler lid (11) (fig. 8).

## On assembly, note the following:

Make sure that you do not forget to install the washed (12) with the expansion pipe (fig. 8).

Hook the dispenser cover plate at the rear into the corresponding grip (see chapter A.2.3).

Note: The reassembly is carried out in reverse order.

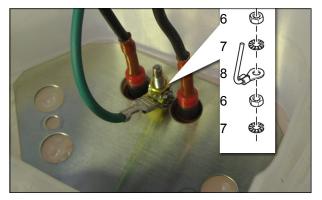


Fig. 6

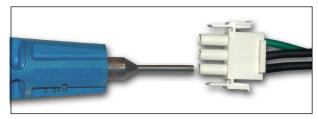


Fig. 7

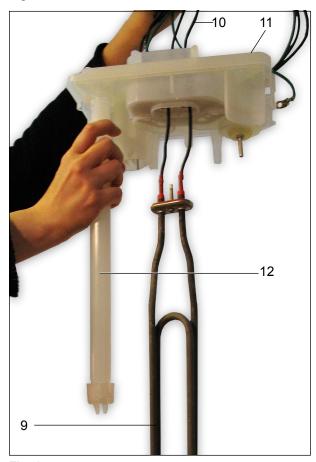


Fig. 8

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# A.2.6 Disassembly of the complete boiler

WARNING: The water in the boiler is hot.

Beware of the risk of scalding. Keep your hands and other parts of your body away from

the hot water.

*Note:* Due to the high temperatures

of the boiler's components, it is advisable to allow the boiler to cool down for several minutes or to rinse the boiler by refilling cold water and draining it before commencing

any work.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.
  - Only if you serve a cafitesse 110 NG dispenser:
- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment and drain the boiler (see chapter A.2.2).
- Unscrew the door stop and undo the 3 screws on the dispenser cover plate (see chapter 2.3).
- Remove the dispenser cover plate (see chapter 2.3).
- Turn up the frame (see chapter A.2.5).
- Undo the 2 screws on the cooling compartment and tilt up the complete cooling compartment (see chapter A.2.3).
- Undo the cable harnesses of the outlet valves at the intermediate plugs and disconnect the outlet hoses from the valves (see chapter 2.3).
- Undo the flat connectors from the overboil sensor (see chapter A.2.3).

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- Remove the overflow hose (fig. 1).
- Disconnect the plugs (1 to 3) of the heating elements from the power supply and pull the cables upwards out of the dispenser (see chapter A.2.5).
- Undo the 2 flat connectors of the temperature sensor and the cable connection of the level sensor at the boiler lid (see chapter 2.4).
- Remove the water inlet hose and take the cable harness boiler out of the clamp at the boiler lid (see chapter A.2.5).

**ATTENTION:** Take care not to damage the

silicone hose during the disassembly of the boiler.

Note: Draw the hose out of the bottom

part of the machine so that it doesn't get caught when lifting the boiler out of the dispenser (fig. 2).

• Pull the complete boiler together with the drain tube upwards out of the housing and then place it on a plane surface (fig. 3).

Note: The reassembly is carried out in

reverse order.



Fig. 1



Fig. 2

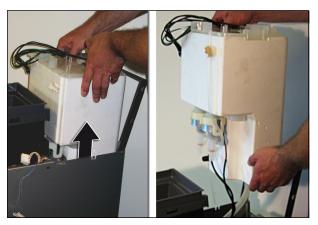


Fig. 3

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# A.3 Electric circuit diagrams

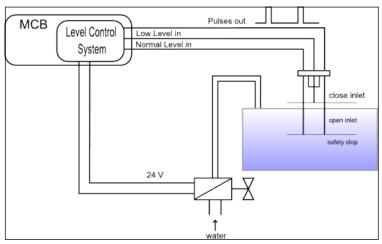


Fig. 1 Inlet

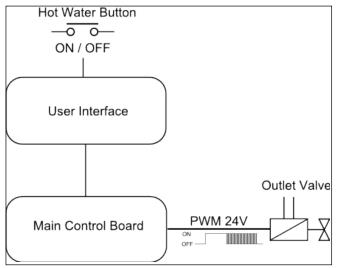


Fig. 2 Outlet

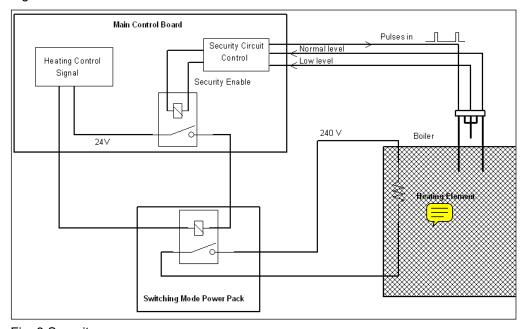


Fig. 3 Security

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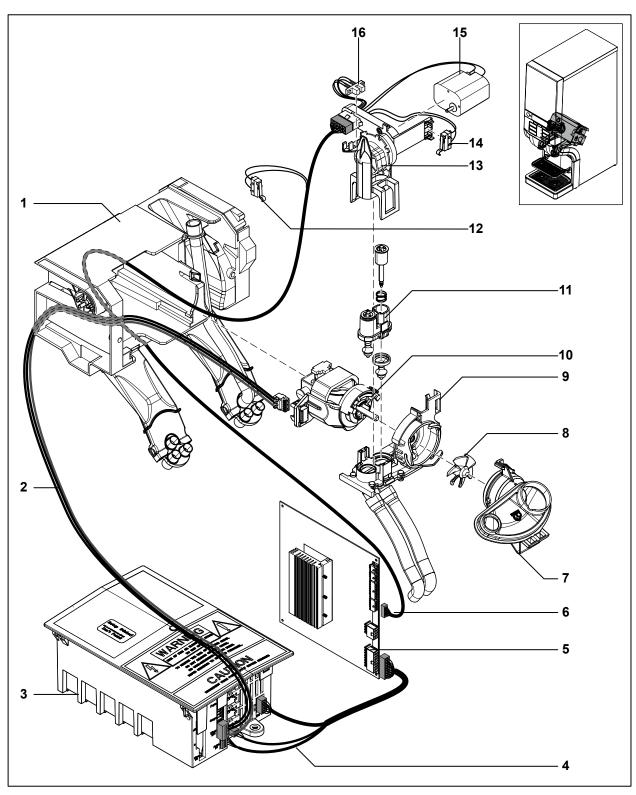
# C Dosing system

# C.1 Adjustments

WHAT	ном
Mixer time	Adjustment via software
Mixer delay	Adjustment via software
Test – dosing of drink or concentrate	Adjustment via software
Pause	Adjustment via software
Ratio	Adjustment via software

### **Disassemblies**

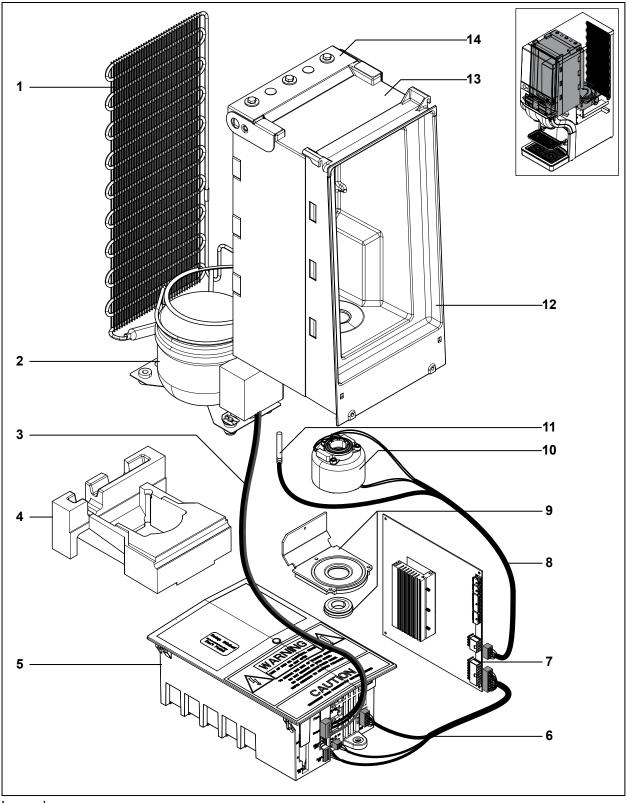
#### C.2.1 Overview MAD foam unit



#### Legend:

- 1 MAD console
- 2 Cable haress mixer
- 3 Power Pack
- 4 Cable harn. MCB power pack
- 5 Main Control Board MCB
- 6 Cable harness MAD
- 7 Front mixing bowl 8 Impeller
- 9 Rear mixing bowl incl hoses
- 10 Mixermotor
- 11 MAD valves
- 12 Mini switch ,MAD in place'
- 13 CAM shaft
- 14 Mini switch ,front bowl'
- 15 CAM shaft motor
- 16 Light barrier

#### C.2.2 Overview cooling system



Legend:

1 Condenser grid

2 Compressor

3 Cable harness compressor

4 Bottom insulation cooling comp 10 B2-coil

5 Power pack

6 Cable harn. MCB-power pack

7 Main Control Board

8 Cable harness cooling comp.

9 Cooling plate with damping ring

11 Temperature sensor

12 Cooling compartment

13 Insulation cooling compartment

14 Fixing parts cooling comp.

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### C.2.3 Disassembly of the B2 coil

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment (see chapter A.2.2).
- Remove the dispenser cover plate (see chapter A.2.3).
- Tilt up the complete cooling compartment (see chapter A.2.3) (fig. 1).
- Undo the plastic screw with wash, (fig. 2).
- Pull off the insulation bottom (2) (fig. 2).
- Undo the fastening screw of the cooling plate extension (3) underneath the cooling box (fig. 2).

#### B2 coil and empty detection

- Undo the cable harness B2 coil at the intermediate connector.
- Undo the 3 screws on the cooling plate (4) (fig. 3).
- Remove the cooling plate and push out the damping ring (5) if it is damaged (fig. 3).
- Take off the complete B2 coil (6) including empty detection (7) (fig. 4).

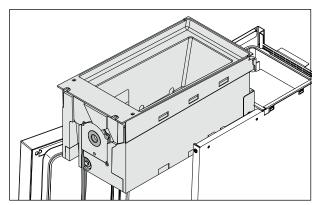


Fig. 1

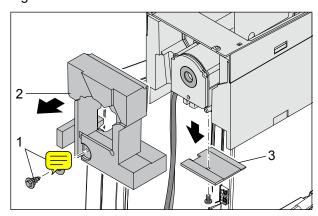


Fig. 2

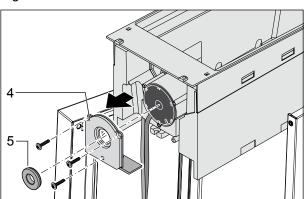


Fig. 3

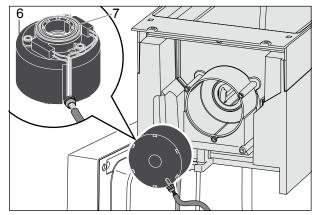


Fig. 4

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#### **Temperature sensor**

- Undo the cable harness temperature sensor at the intermediate connector.
- Draw off the temperature sensor (8) on the left side below the coil (fig. 5).

Note: The reassembly is carried out in reverse order.

## On assembly, note the following:

Hook the dispenser cover plate at the rear into the corresponding grip (see chapter A.2.3).

Take care to insert the damping ring before assembling.

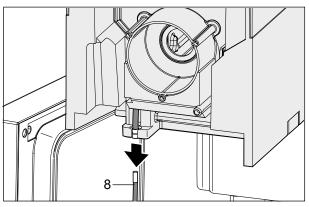


Fig. 5

### C.2.3 Disassembly of the mixing unit (only for Cafitesse 120 NG)

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.
- Pull down the cover fluid treatment (see chapter A.2.2).

Note: The cafitesse NG 120 is not equipped with a cover coolbox.

- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment (see chapter A.2.2).
- Pull the locking device (1) to release the complete mixing console (fig. 1).
- Rotate the mixing bowl (2) counterclockwise to release it and remove it with the sealing ring (fig. 2).
- Undo the 2 screws (3) at the mixing cover console (4) and remove the cover console. (fig. 3).
- Remove the outlet hose (5) on the right side and the 2 outlet hoses (6) on the left side (fig. 3)
- Press the switch (7) on the right side to unhook the mixing unit and take it out (fig. 4).
- Use a screwdriver to unhook the mixing console at the snap-fits (8) on both sides and pull the mixing console out of the guide rails (fig. 4).
- Undo the cable harness from the from the connector (9) and the cable harness from the micro switch (10) (fig. 5).



Fig. 5

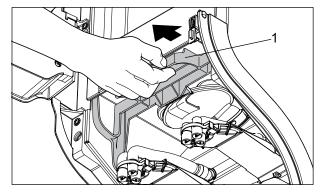


Fig. 1

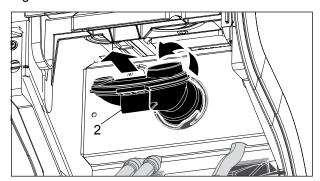


Fig. 2

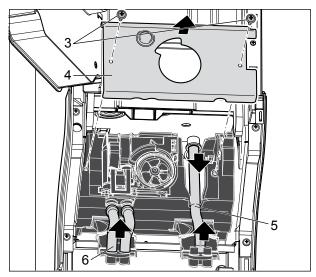


Fig. 3

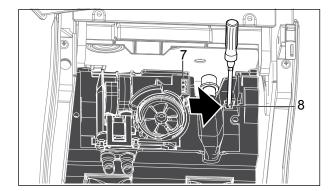


Fig. 4

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#### Disassembly of the gear motor

- Loosen the clamps at the CAM support (11) and take off the CAM support together with the gear motor (12) (fig. 6).
- Pull off the counter bearing (13) and the light barrier (14) (fig. 6).
- Remove the CAM shaft (14) (fig. 7).
- Pull off the submini switch (16) (fig. 7).
- Undo the plug by pressing the snap-fits (17) (fig. 7).
- Undo the 3 screws (19) on the CAM support (20) and remove the gear motor (18) (fig. 7).

#### On assembly, note the following:

Attend to the flat at the CAM for correct positioning.

#### Disassembly of the valve unit

- Push the 2 snap-fits (22) together to release the valve unit (21) and than take it out upwards (fig. 6).
- Pull off the membranes (25), tappet rods (23) and springs (24) come undone for the respective valve (fig. 6).

### On assembly, note the following:

Do not forget the springs when you reintegrate the valves.

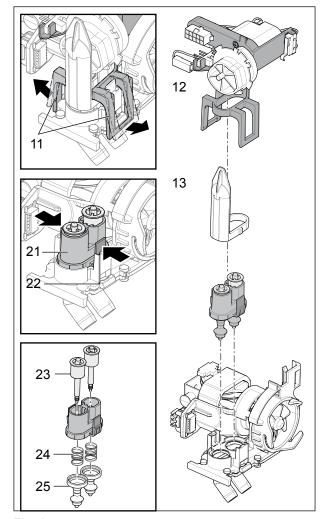


Fig. 6

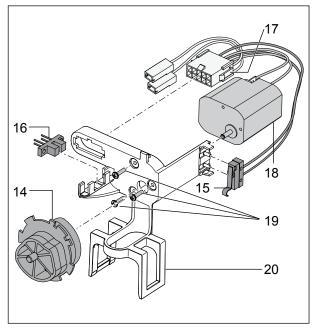


Fig. 7

#### Disassembly of the valve seal and impeller

- Use a screwdriver to loosen the 5 dump bells (26) from the valve seat (27) and remove the seat (fig. 8).
- · Remove the sealing (28).
- Use a screwdriver to undo the impeller (29) through the bottom opening of the rear mixing bowl (30) (fig. 9).

#### Disassembly of the mixing unit motor

- Unhook the snap-fit (31) of the mixer motor mounting flange (fig. 10).
- Turn the mixer motor (32) counterclockwise and take it off from the rear mixing bowl (fig. 10).
- Undo the 3 screws (33) and remove the mixer motor (fig. 11).
- Push the mixing unit motor seal (34) through the rear mixing bowl (fig. 11).

Note: The reassembly is carried out in reverse order.

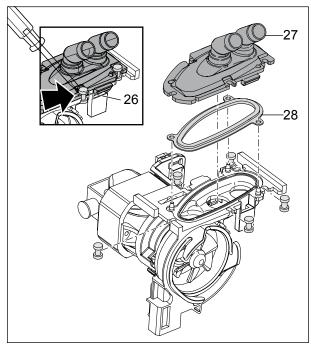


Fig. 8

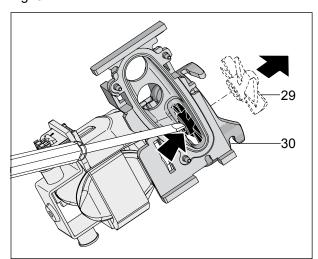


Fig. 9

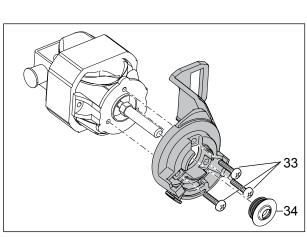


Fig. 11

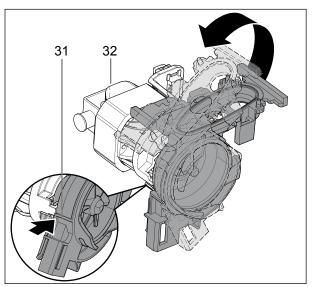


Fig. 10

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## C.3 Electric circuit diagrams

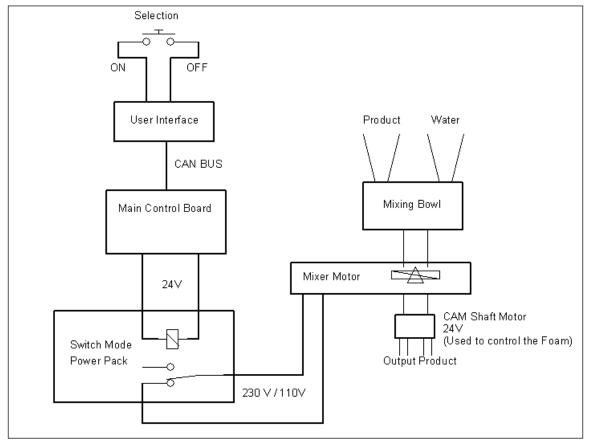


Fig. 1 MAD foam

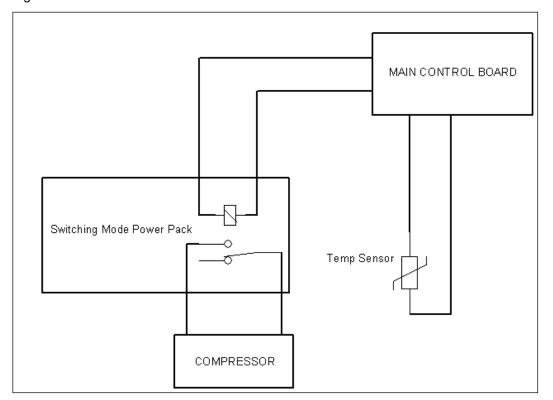


Fig. 2 Cooling system

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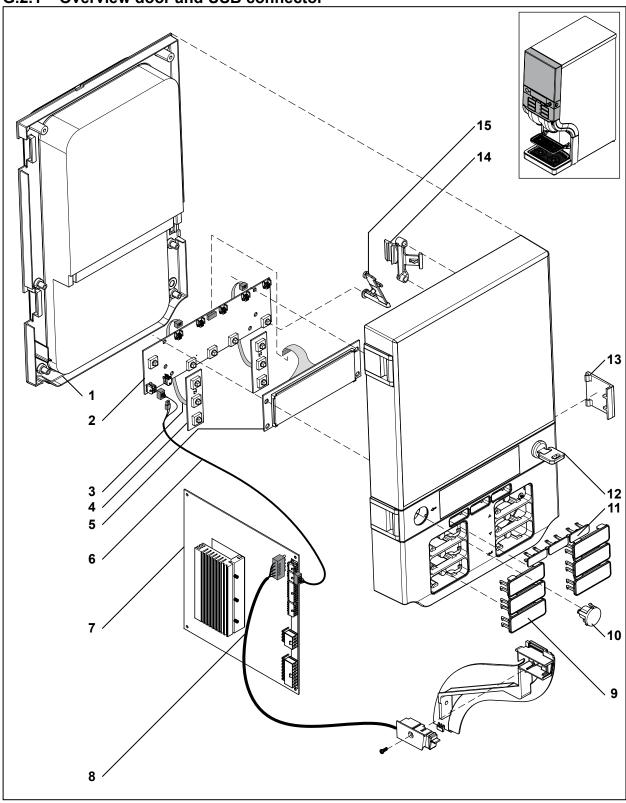
# **G** Housing

## **G.1** Adjustments

Not available here.

#### **G.2 Disassemblies**

#### Overview door and USB connector G.2.1



Legend:

1 Door inlay incl. insulation

2 User interface board

3 Flat band cable harness

4 Push button board

5 Icon display

6 Cable harness door

7 Main control board

8 Cable harness USB connector 14 Door snap

9 Push button

10 STOP button

11 Preselection button

12 Lock incl. key

13 Door button

15 Actuator ,Error Clear' switch

## G.2.2 Disassembly of the dispenser door including circuit board



- Disconnect the dispenser from the power supply system and close the water tap.
- · Remove the cuptray and the driptray and open the dispenser door.
- · Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment (see chapter A.2.2).
- · Unscrew the door stop on the top and remove the cover plate of the dispenser (see chapter A.2.3)
- · Tilt up the complete cooling compartment (see chapter A.2.3).
- Push the nozzle (2) through the hole (3) (fig. 1).
- · Unplug the cable harness door from the main control board (4) and pull it through the hole (fig 1).
- Undo 4 screws (1) and pull the door out of the hinges (fig. 1).
- · Remove the door and put it on a soft mat to avoid scratches.
- The reassembly is carried out in reverse order.

#### Disassembly of the circuit boards

#### ATTENTION:

During the replacement of the circuit boards always work with ESD-protection (e. g. use an ESD wristband), in order to prevent damage to the PC boards and their components due to electric charge.

- Undo 7 screws on the door and remove the door inlay. (fig. 2)
- Undo 2 screws (5) of the user interface board (6) (fig. 3).
- Undo the 2 flat strip cables (7) (fig. 3).
- · Undo the foil cable (8) and take off the user interface board (fig. 3).

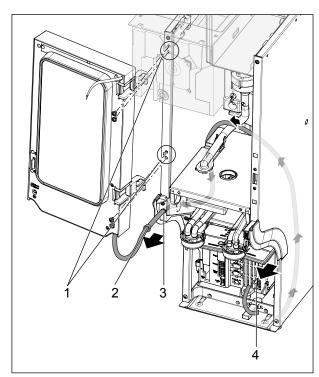


Fig. 1

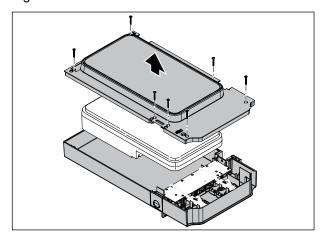


Fig. 2

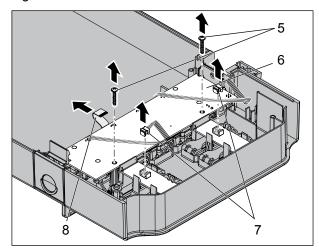


Fig. 3

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- Undo the power cable and the data cable (9) (fig. 4).
- Take the icon display (10) and 2 push button panels (11) out of the snap-fits (fig. 4).

Note: The reassembly is carried out in

reverse order.

### On assembly, note the following:

Please note that the slots on the push button panels are arranged on the top left.

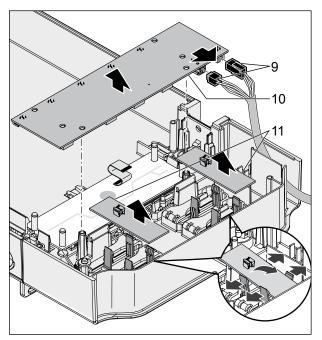


Fig. 4

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# K Power supply unit and control system

# K.1 Adjustments

WHAT	ном
Heating capacity	- via change over switch on the power pack or - via contact bridges inside the power pack or - heating capacity not adjustable depending on the dispenser type - see chapter 2. ,Installation

## K.2 Disassemblies

### K.2.1 Overview

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### K.2.2 Disassembly of the power pack including mains plug and circuit board

#### ATTENTION:

During the replacement of the circuit boards always work with ESD-protection (e. g. use an ESD wristband), in order to prevent damage to the PC boards and their components due to electric charge.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment (see chapter A.2.2).

#### Disassembly of the power pack

- Undo the 2 screws on the rear cover (1) of the dispenser and remove the rear cover (fig. 1).
- Undo the nozzle (2) and pull the plug through the rear cover (fig. 1).
- Undo all plugs on the front of the power pack (3) (fig. 2).
- Unlock the snap lock (4) from the power pack (fig. 2).
- Lift the power pack and pull it out from the dispenser (fig. 2).

#### On assembly, note the following:

All plugs are coded and have to be positioned correctly into the connectors of the power pack.

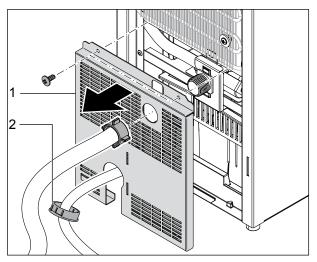


Fig. 1

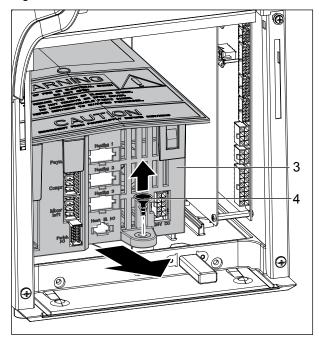


Fig. 2

#### Disassembly of the mains plug

 Unfix the 2 clamps on the front and at the rear of the power pack and tilt up the lid (fig 3).

#### **USA/1** phase

Note:

On assembly, make sure that the main cable is placed correctly in the same position and that all plugs are positioned correctly into the connectors of the board.

- Remove the grey wire (6) and the black wire (5) out of the WAGO clamps (fig. 4).
- Unscrew the wire earthing (7) (fig. 4)
- · Pull off the mains cable.

The assembly procedure is carried out in the reverse order of steps.

#### On assembly, note the following:

Make sure to insert the strain-relief.

Note:



It is possible to retrofit the USA 1-phase power pack into a USA 2-phase power pack. This kind of modification must be done by an approved UL-workshop.

#### EUR/3 phase

Note:

On assembly, make sure that the main cable is placed correctly in the same position and that all plugs are positioned correctly into the connectors of the board.

- Undo 5 cable connections from the mains cable (green, blue, red, white and black) (fig. 5)
- · Pull off the mains cable.
- The assembly procedure is carried out in the reverse order of steps.

#### EUR/1 phase

Note:

On assembly, make sure that the main cable is placed correctly in the same position and that all plugs are positioned correctly into the connectors of the board.

- Undo 3 cable connections from the mains cable (blue, green, brown) (fig. 6)
- · Pull off the mains cable.

Note: The reassembly is carried out in

reverse order.

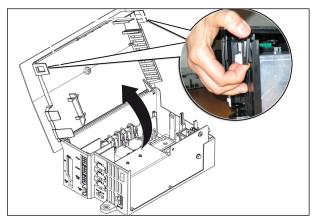


Fig. 3

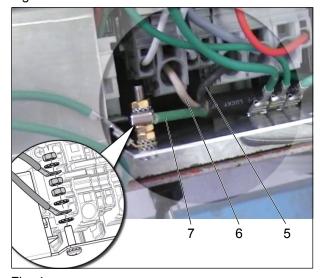


Fig. 4

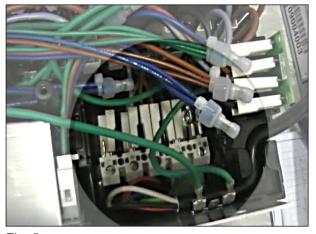


Fig. 5

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#### Disassembly of the switch mode power pack

#### ATTENTION:

During the replacement of the circuit boards always work with ESD-protection (e. g. use an ESD wristband), in order to prevent damage to the PC boards and their components due to electric charge.

- Undo 1 screw on the side of the switch mode power pack (fig. 7).
- Remove the switch mode power pack together with the cooler sheet.
- Undo the connector (8) of the switch mode power pack. (fig 8).
- Undo the 2 screws (9) and remove the SMPP board from the spacers (fig. 7).

#### Disassembly of the multi relais board

- Pull the multi relais board out off the spacers (fig. 9).
- Undo the connector of the multi relais board.

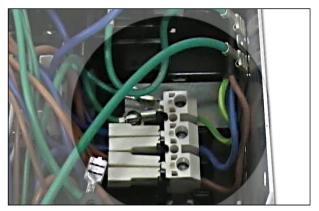


Fig. 6

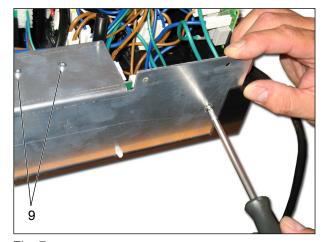


Fig. 7

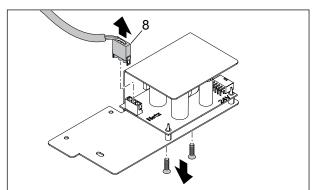


Fig. 8

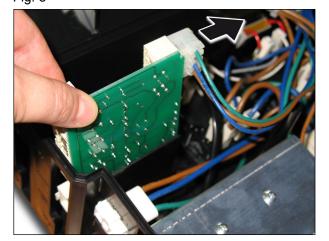


Fig. 9

### K.2.3 Disassembly of the main control board

ATTENTION:

During the replacement of the circuit boards always work with ESD-protection (e. g. use an ESD wristband), in order to prevent damage to the PC boards and their components due to electric charge.

- Disconnect the dispenser from the power supply system and close the water tap.
- Remove the cuptray and the driptray and open the dispenser door.
- Remove the product pack from the cooling compartment and store it in the refrigerator.

Only if you serve a cafitesse 110 NG dispenser:

- Unscrew the 2 releasable rivets on the cover coolbox (see chapter A.2.2).
- Pull down the cover fluid treatment (see chapter A.2.2).
- Undo 2 releasable rivets at the splash panel and remove the overflow hose on the inside of the splash panel (see chapter A.2.2).
- Remove the splash panel together with the cover fluid treatment (see chapter A.2.2).

#### Disassembly of the main control board

- If necessary, remove the power pack from the dispenser (see chapter K.2.2).
- Pull off all the plugs from the main control board (2) (fig. 1).

Note:

When dissassembling the USB plug watch to the arrangement of the USB poles.

- Undo the USB (3) plug (fig. 1).
- Unlock the snap lock (1) from the main control board cover and take the board with cover out of the dispenser (fig. 1).

Note: Make a note of the correct position of the main control board.

 Undo 4 screws and take off the board from the cover and put it on protective surface against electrostatic charge (fig. 2).

Note:

The reassembly is carried out in reverse order.

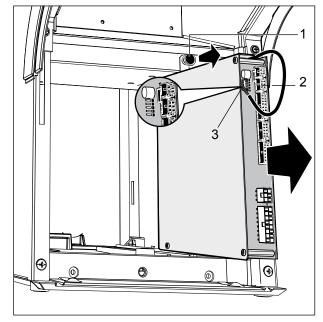


Fig. 1

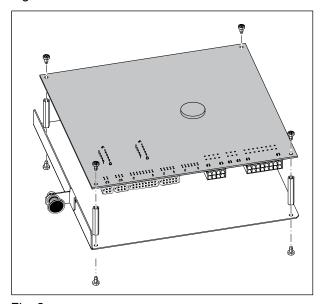


Fig. 2

#### On assembly, note the following:

Make sure to fix the main control board back onto the cover in the correct position.

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